



Short-Term Energy Outlook (STEO)

Forecast highlights

Global liquid fuels

- Brent crude oil spot prices averaged \$59 per barrel (b) in January, up \$2/b from December 2018 but \$10/b lower than the average in January of last year. EIA forecasts Brent spot prices will average \$61/b in 2019 and \$62/b in 2020, compared with an average of \$71/b in 2018. EIA expects that West Texas Intermediate (WTI) crude oil prices will average \$8/b lower than Brent prices in the first quarter of 2019 before the discount gradually falls to \$4/b in the fourth quarter of 2019 and through 2020.
- EIA estimates that U.S. crude oil production averaged 12.0 million barrels per day (b/d) in January, up 90,000 b/d from December. EIA forecasts U.S. crude oil production to average 12.4 million b/d in 2019 and 13.2 million b/d in 2020, with most of the growth coming from the Permian region of Texas and New Mexico.
- Global liquid fuels inventories grew by an estimated 0.5 million b/d in 2018, and EIA expects they will grow by 0.4 million b/d in 2019 and by 0.6 million b/d in 2020.
- U.S. crude oil and petroleum product net imports are estimated to have fallen from an average of 3.8 million b/d in 2017 to an average of 2.4 million b/d in 2018. EIA forecasts that net imports will continue to fall to an average of 0.9 million b/d in 2019 and to an average net export level of 0.3 million b/d in 2020. In the fourth quarter of 2020, EIA forecasts the United States will be a net exporter of crude oil and petroleum products by about 1.1 million b/d.

Natural gas

- The Henry Hub natural gas spot price averaged \$3.13/million British thermal units (MMBtu) in January, down 91 cents/MMBtu from December. Despite a cold snap in late January, average temperatures for the month were milder than normal in much of the country, which contributed to lower prices. EIA expects strong growth in U.S. natural gas production to put downward pressure on prices in 2019. EIA expects Henry Hub natural gas spot prices to average \$2.83/MMBtu in 2019, down 32 cents/MMBtu from the 2018 average. NYMEX futures and options contract values for May 2019 delivery traded during the five-day period ending February 7, 2019, suggest a range of \$2.15/MMBtu to \$3.30/MMBtu encompasses the market expectation for May 2019 Henry Hub natural gas prices at the 95% confidence level.

- EIA forecasts that dry natural gas production will average 90.2 billion cubic feet per day (Bcf/d) in 2019, up 6.9 Bcf/d from 2018. EIA expects natural gas production will continue to rise in 2020 to an average of 92.1 Bcf/d.

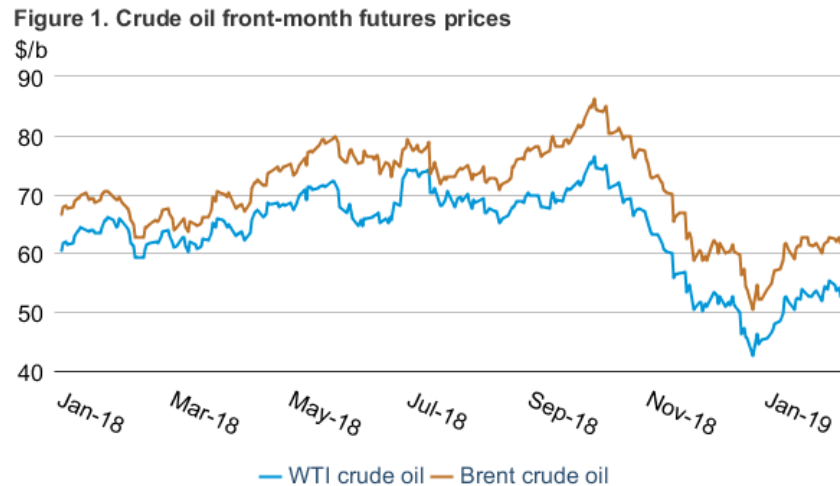
Electricity, coal, renewables, and emissions

- EIA expects the share of U.S. total utility-scale electricity generation from natural gas-fired power plants to rise from 35% in 2018 to 36% in 2019 and to 37% in 2020. EIA forecasts that the electricity generation share from coal will average 26% in 2019 and 24% in 2020, down from 28% in 2018. The nuclear share of generation was 19% in 2018 and EIA forecasts that it will stay near that level in 2019 and in 2020. The generation share of hydropower is forecast to average slightly less than 7% of total generation in 2019 and 2020, similar to last year. Wind, solar, and other nonhydropower renewables together provided about 10% of electricity generation in 2018. EIA expects them to provide 11% in 2019 and 13% in 2020.
- EIA expects average U.S. solar generation will rise from 265,000 megawatthours per day (MWh/d) in 2018 to 301,000 MWh/d in 2019 (an increase of 14%) and to 358,000 MWh/d in 2020 (an increase of 19%). These forecasts of solar generation include large-scale facilities as well as small-scale distributed solar generators, primarily on residential and commercial buildings.
- In 2019, EIA expects wind's annual share of generation will exceed hydropower's share for the first time. EIA forecasts that wind generation will rise from 756 MWh/d in 2018 to 859 MWh/d in 2019 (a share of 8%). Wind generation is further projected to rise to 964 MWh/d (a share of 9%) by 2020.
- EIA estimates that U.S. coal production declined by 21 million short tons (MMst) (3%) in 2018, totaling 754 MMst. EIA expects further declines in coal production of 4% in 2019 and 6% in 2020 because of falling power sector consumption and declines in coal exports. Coal consumed for electricity generation declined by an estimated 4% (27 MMst) in 2018. EIA expects that lower electricity demand, lower natural gas prices, and further [retirements of coal-fired capacity](#) will reduce coal consumed for electricity generation by 8% in 2019 and by a further 6% in 2020. [Coal exports](#), which increased by 20% (19 MMst) in 2018, decline by 13% and 8% in 2019 and 2020, respectively, in the forecast.
- After rising by 2.8% in 2018, EIA forecasts that U.S. energy-related carbon dioxide (CO₂) emissions will decline by 1.3% in 2019 and by 0.5% in 2020. The 2018 increase largely reflects increased weather-related natural gas consumption because of additional heating needs during a colder winter and for additional electric generation to support more cooling during a warmer summer than in 2017. EIA expects emissions to decline in 2019 and 2020 because of forecasted temperatures that will return to near normal. Energy-related CO₂ emissions are sensitive to changes in weather, economic growth, energy prices, and fuel mix.

Petroleum and natural gas markets review

Crude oil

Prices: The front-month futures price for Brent crude oil settled at \$61.63 per barrel (b) on February 7, an increase of \$6.72/b from January 2. The front-month futures price for West Texas Intermediate (WTI) crude oil for delivery at Cushing, Oklahoma, increased by \$6.10/b during the same period, settling at \$52.64/b on February 7 (**Figure 1**).

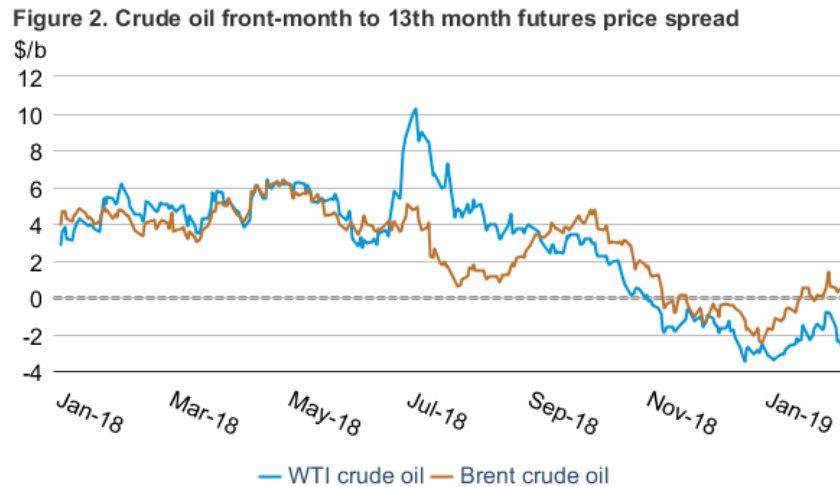


eia CME Group and Intercontinental Exchange, as compiled by Bloomberg L.P.

After two consecutive months of price declines, crude oil prices increased throughout January and into February as global oil supplies declined relatively quickly. The [agreement](#) among members of the Organization of the Petroleum Exporting Countries (OPEC) and several non-OPEC countries to reduce production by 1.2 million barrels per day (b/d) began in January. Saudi Arabia announced it was reducing production by more than it initially agreed, and unplanned supply outages have reduced production in Libya to about 0.8 million b/d, down from 1.2 million b/d in November. The province of Alberta also instituted its own production restraints, which EIA estimates contributed to a decline in Canada's supply of about 0.4 million b/d from December to January, adding further tightness to global oil supply. Although it did not cause any immediate loss to global oil availability, the United States [imposed sanctions](#) on Venezuela's state-owned oil company, PDVSA, in late January, which may disrupt regular trade flows and increase the risk for an oil supply outage.

The expectations for lower demand that contributed to falling prices in December may have ebbed slightly in January and provided some support to oil prices. The Bureau of Labor Statistics reported that [the United States added 304,000](#) jobs in January, which was larger than expected, and the Institute for Supply Management's (ISM) manufacturing Purchasing Managers' Index (PMI) increased to 56.6, signifying expansion in U.S. manufacturing activity.

STEO estimates that in February, total global petroleum inventories will fall by 1.3 million b/d, the largest drop since November 2017. Because of the increased short-term risks related to global crude oil supply, the Brent crude oil futures curve developed a slight backwardation (when near-term futures contracts are higher than longer dated ones) in January. The Brent and WTI 1st–13th futures contract price spread settled at 48 cents/b and -\$2.65/b, respectively, on February 7, an increase of \$2.21/b and 69 cents/b since January 2, respectively (**Figure 2**).



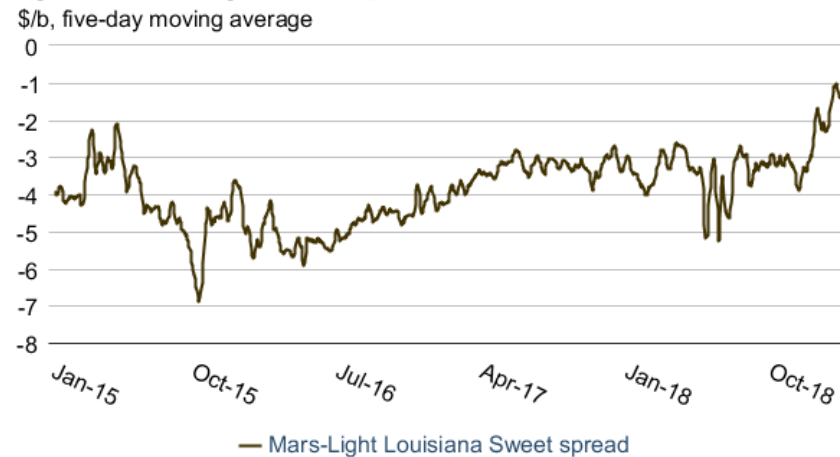
eia CME Group and Intercontinental Exchange, as compiled by Bloomberg L.P.

Despite the forecast global oil inventory draws in February and lower forecast OPEC crude oil production in 2019 compared with the January STEO, EIA forecasts that U.S. crude oil production growth will offset decreases in OPEC production throughout the forecast. Even though recent economic data from the United States was positive, EIA (based on data from Oxford Economics) revised its forecast for global oil-weighted GDP growth down slightly from the January STEO. This revision, along with revisions to historical demand estimates that carried through to the forecast, contributed to a slight downward revision in the global oil consumption forecast. Given this forecast, EIA expects global petroleum stocks will build through 2019 and 2020 at a rate of 0.4 million b/d and 0.6 million b/d, respectively. Those builds are larger than forecast last month. As a result, EIA now forecasts Brent crude oil prices will average \$61/b in 2019 and \$62/b in 2020. The 2020 forecast is \$3/b lower than in the January STEO.

Crude oil quality spreads: The reductions in oil production from OPEC countries and Canada and the threat of disruptions in Venezuela are likely increasing the price of medium and heavy crude oils compared with light crude oils. These countries tend to produce [medium and heavy grades of crude oil with higher sulfur content](#), so a large share of the global oil supply reductions in January has been of this quality. The price of Mars—a medium, sour crude oil produced in the U.S. Gulf of Mexico—has increased compared with light, sweet crude oils. The five-day moving average of the Mars–Light Louisiana Sweet (LLS) crude oil price spread narrowed to nearly -\$1/b on January 29 and settled at -\$1.38/b on February 7 (**Figure 3**). Mars traded on average at \$3–\$4/b lower than LLS throughout 2017–18. Typically, medium, sour crude oils like Mars sell at

lower prices than light, sweet crude oils like LLS because they require more expensive refining equipment and operations to convert the oil into finished petroleum products.

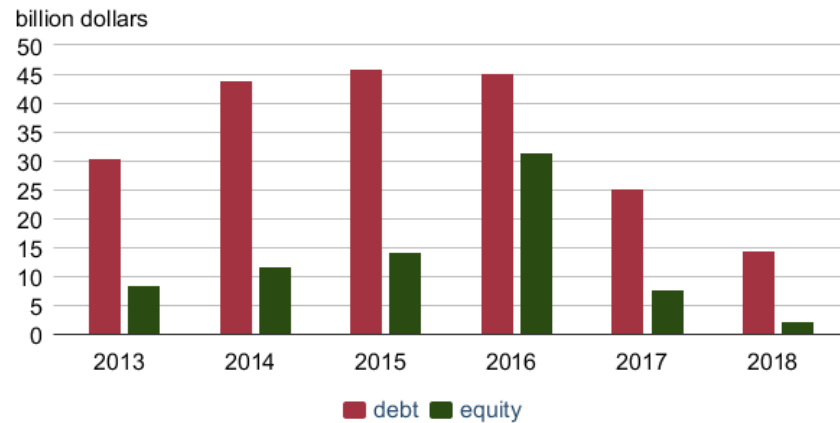
Figure 3. Medium-light crude oil price differentials



eia Bloomberg L.P.

U.S. oil company debt and equity issuance: In 2018, publicly traded U.S. oil exploration and production companies issued the lowest amount of new funding since at least 2013, raising \$14 billion in debt and \$2 billion from public equity markets (**Figure 4**). Several factors likely contributed to reduced financing activity in 2018 compared with previous years. First, the relatively higher level of interest rates in 2018 contributed to a higher cost of issuing debt or equity for all companies, including oil companies. The U.S. Federal Funds rate averaged 1.8% in 2018, the [highest since 2008](#), and [energy sector bond yields](#) increased in the fourth quarter as crude oil prices declined. In addition to higher interest rates, oil companies may have needed less outside sources of capital than in previous years. Through third-quarter 2018, a group of 46 U.S. oil producers generated \$56 billion in cash flow from operating activities. The amount of cash flow from operations through the first three quarters of 2018 was higher than full-year amounts from 2015–17. As a result, full-year 2018 cash flow will likely be the highest annual total since 2014 for these companies. Collectively, they spent \$60 billion in capital expenditures and generated a net \$8 billion from asset sales. Because cash from operations plus asset sales exceeded capital expenditures, many companies may have had enough cash to fund their investing activities without the need to issue debt or equity.

Figure 4. U.S. exploration and production company debt and equity issuance

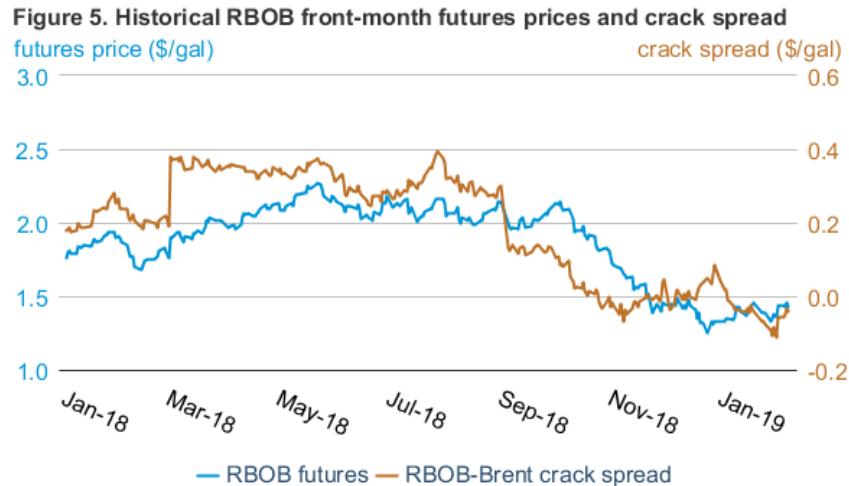


 U.S. Energy Information Administration, based on Evaluate Energy

Petroleum products

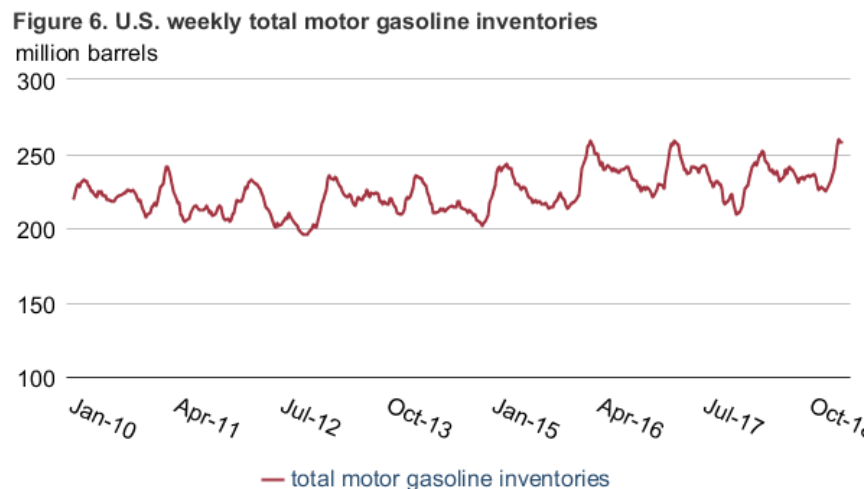
Gasoline prices: The front-month futures price of reformulated blendstock for oxygenate blending (RBOB, the petroleum component of gasoline used in many parts of the country) settled at \$1.43 per gallon (gal) on February 7 (**Figure 5**), an increase of 10 cents/gal from January 2. The RBOB–Brent crack spread (the difference between the price of RBOB and the price of Brent crude oil) decreased by 6 cents/gal to settle at -4 cents/gal during the same period.

From November through January, the RBOB–Brent crack spread was negative for 43 of the 62 trading days, a record amount of time the crack spread was negative for any three-month period since RBOB began trading in 2005. The low cracks spreads reflect relatively flat gasoline demand growth relative to strong supply globally, resulting in elevated inventory levels. Although gasoline crack spreads typically decline seasonally to the [lowest levels of the year](#) in the winter months, they tend to begin increasing in January. This year, however, the decline in the monthly average RBOB crack spread from December to January was the largest for that period since the RBOB contract began trading, falling by 7 cents/gal.



eia CME Group, as compiled by Bloomberg L.P., RBOB=reformulated blendstock for oxygenate blending

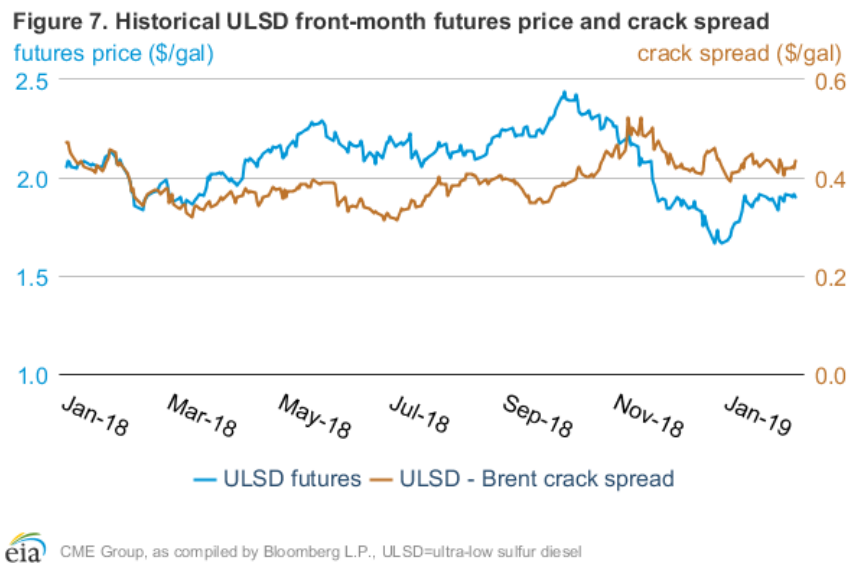
Gasoline inventories are high in every major storage hub globally and are likely contributing to low crack spreads. As of the first week of February, inventories were 15% and 24% higher than their five-year (2014–18) averages in Singapore and the Amsterdam, Rotterdam, and Antwerp (ARA) hubs, respectively. In the United States, gasoline inventories **reached an all-time high of nearly 260 million barrels** for the week ending January 18 (**Figure 6**), declining to 5% higher than the five-year average by February 1. Gasoline inventories and crack spreads could reverse in the coming months as refiners enter maintenance season and seasonal strength in gasoline consumption draws inventories.



eia U.S. Energy Information Administration, Weekly Petroleum Status Report

Ultra-low sulfur diesel prices: The ultra-low sulfur diesel (ULSD) front-month futures price for delivery in New York Harbor settled at \$1.90/gal on February 7 (**Figure 7**), an increase of 20 cents/gal from January 2. The ULSD–Brent crack spread (the difference between the price of

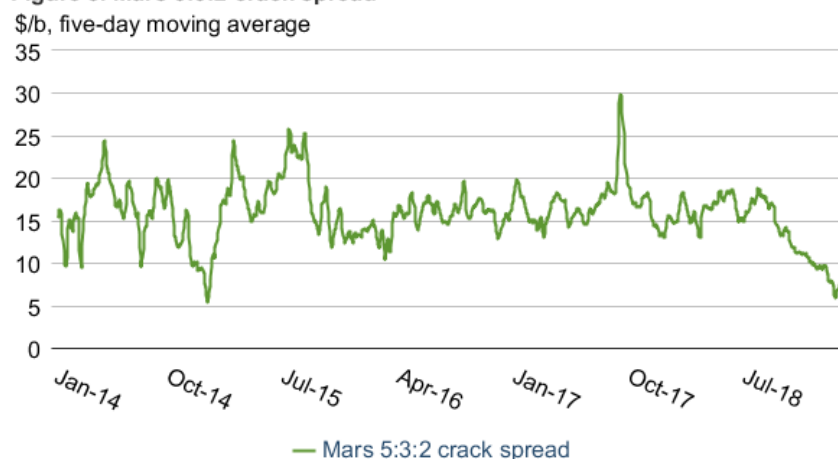
ULSD and the price of Brent crude oil) increased by 4 cents/gal to settle at 43 cents/gal during the same period.



In contrast to gasoline inventories, distillate inventories remain comparatively low in global trading hubs, and low inventory levels are likely contributing to ULSD crack spreads remaining higher than the five-year average for January. In Singapore, ARA, and the United States, distillate inventories were 2%, 19%, and 4% lower than their five-year average levels, respectively, as of the first week of February. EIA estimates that U.S. distillate consumption was 4.3 million barrels per day (b/d) in January, 4% higher than the five-year average for the month.

U.S. Gulf Coast refinery margins: The recent increase in medium and heavy crude oil prices combined with low gasoline crack spreads is contributing to the lowest refinery margins for complex refiners in years. The five-day moving average of a 5:3:2 crack spread—refining three barrels of gasoline and two barrels of distillate from five barrels of Mars crude oil, which exemplifies a [complex](#) U.S. Gulf Coast refinery margin—reached \$5.89/b on January 29, the lowest price since December 2014 (**Figure 8**). The narrowing spreads of medium, sour crude oils with light, sweet crude oils—discussed in the crude oil section above—have increased the feedstock costs of some refiners, whereas negative gasoline crack spreads are also contributing to low refining margins. Comparatively high distillate crack spreads have supported total refinery margins. Individual refiners can, over time, adjust their feedstock slate and refinery output through operational changes in response to crude oil and petroleum product prices. Refining margins in the U.S. Gulf Coast are typically some of the highest in the world because they have [upgraded equipment](#) to refine lower-cost heavy crude oils into valuable refined products, among other factors.

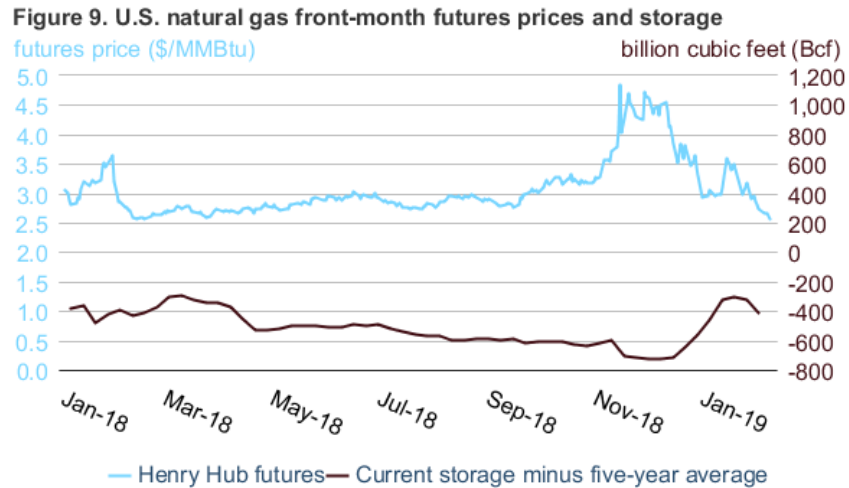
Figure 8. Mars 5:3:2 crack spread



eia Bloomberg L.P.

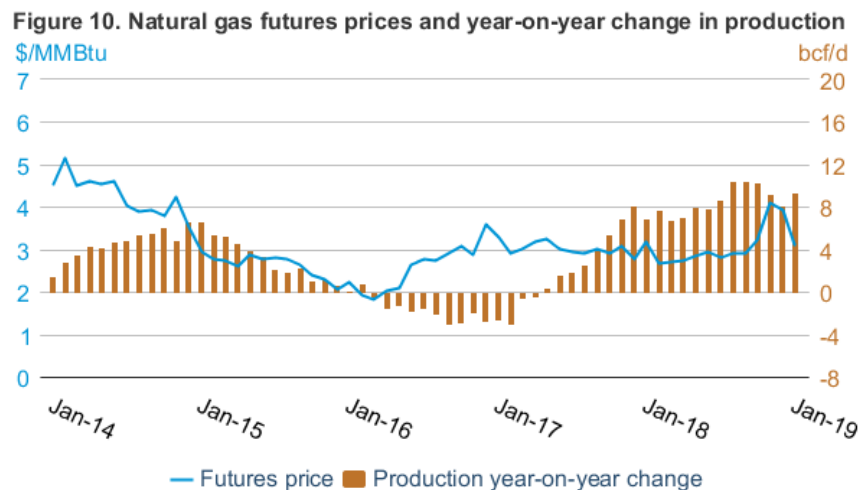
Natural Gas

Prices: The front-month natural gas futures contract for delivery at the Henry Hub settled at \$2.55/million British thermal units (MMBtu) on February 7, a decrease of 41 cents/MMBtu from January 2 (**Figure 9**). Temperatures were much warmer than normal across the Lower 48 states for the first three weeks of January, resulting in lower-than-normal heating degree days (HDD) and withdrawals from natural gas storage. The natural gas inventory deficit to the five-year (2014–18) average narrowed from 560 billion cubic feet (Bcf) on December 28, 2018, to 305 Bcf on January 18, 2019. A polar vortex during the last few days of January in the Midwest and Northeast significantly increased HDD and natural gas demand in residential and commercial sectors. PointLogic Energy estimated that U.S. residential and commercial sector natural gas consumption on January 30 was the [second-highest amount](#) ever recorded. The colder weather prompted higher-than-normal withdrawals from natural gas underground storage at the end of January. This change contributed to a sharp, but relatively brief, increase in natural gas futures prices in the second half of January. By the first week of February, prices had returned to levels last seen in February 2018.



eia U.S. Energy Information Administration, CME Group, as compiled by Bloomberg L.P.

U.S. natural gas production: Total U.S. dry natural gas production reached an estimated 87 billion cubic feet per day (Bcf/d) in January, 9.4 Bcf/d higher than year-ago levels. Front-month natural gas futures prices during this period of production growth have not experienced a decline with increased production, as occurred in 2014 and 2015 (**Figure 10**), most likely because of lower-than-average inventory levels. Higher domestic and international demand helped to keep inventories well below the five-year average for the past year.



eia U.S. Energy Information Administration, CME Group, as compiled by Bloomberg L.P.

Notable forecast changes

- EIA forecasts Brent and West Texas Intermediate crude oil spot prices will average \$62 per barrel (b) and \$58/b, respectively, in 2020, which are both \$3/b lower than in the January STEO. The lower price reflects the expectation of looser global oil market balances in 2020 compared with last month's outlook. Global oil supply was revised up for 2020, largely as a result of higher forecast crude oil production in the United States. At the same time, global oil demand for 2020 is slightly lower than previously forecast because of lower forecast global GDP growth.
- EIA forecasts U.S. crude oil production to average 12.4 million barrels per day (b/d) in 2019 and 13.2 million b/d in 2020, which are both more than 0.3 million b/d higher than in the January forecast. The forecast reflects an assumption of more productive wells both in the Permian Basin and in the Gulf of Mexico. The updated well productivity resulted from adjustments made because of incoming data during the month. In addition, EIA's assumptions of pipeline constraints in the Permian Basin do not moderate production growth in that area as much as previously forecast.
- For more information, see the [detailed table of STEO forecast changes](#).

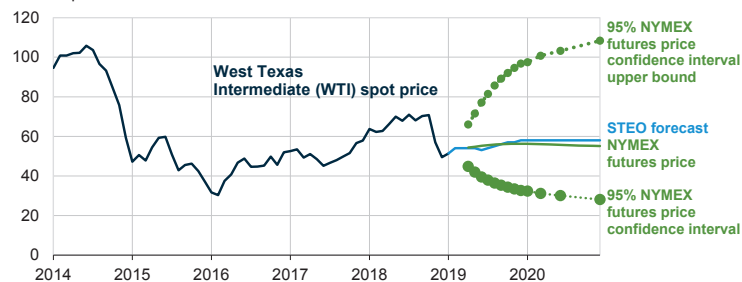
This report was prepared by the U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy. By law, EIA's data, analyses, and forecasts are independent of approval by any other officer or employee of the United States Government. The views in this report therefore should not be construed as representing those of the U.S. Department of Energy or other federal agencies.



Short-Term Energy Outlook

Chart Gallery for February 2019

West Texas Intermediate (WTI) crude oil price and NYMEX confidence intervals
dollars per barrel

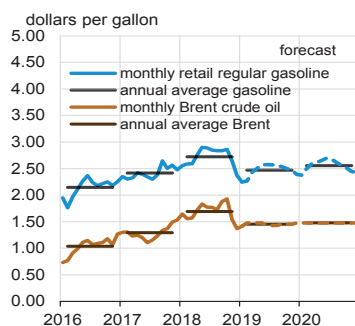


Note: Confidence interval derived from options market information for the five trading days ending Feb 7, 2019. Intervals not calculated for months with sparse trading in near-the-money options contracts.

Source: Short-Term Energy Outlook, February 2019, and CME Group

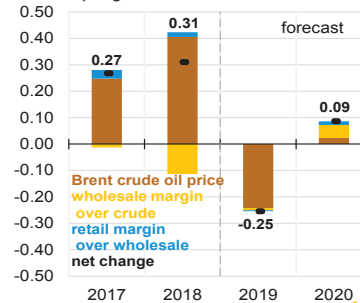


U.S. gasoline and crude oil prices

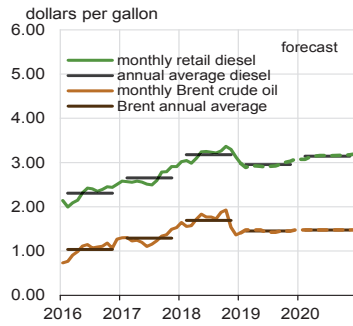


Source: Short-Term Energy Outlook, February 2019

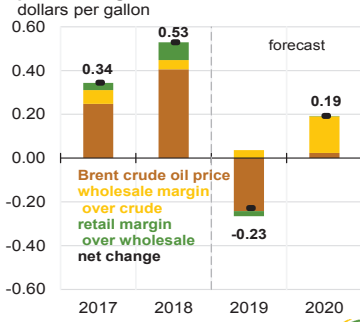
Components of annual gasoline price changes
dollars per gallon



U.S. diesel and crude oil prices

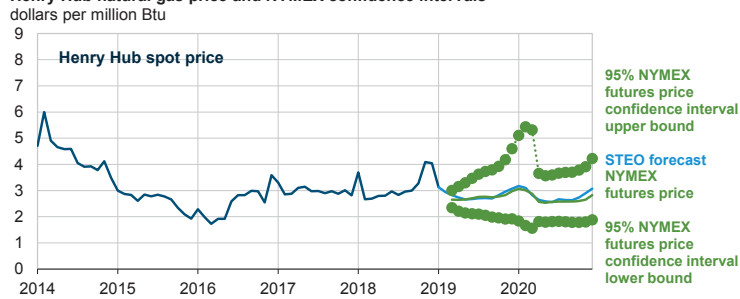


Components of annual diesel prices changes



eia

Henry Hub natural gas price and NYMEX confidence intervals

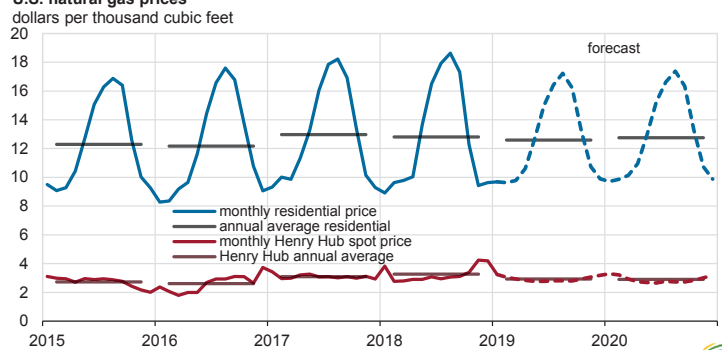


Note: Confidence interval derived from options market information for the five trading days ending Feb 7, 2019. Intervals not calculated for months with sparse trading in near-the-money options contracts.

Source: Short-Term Energy Outlook, February 2019, and CME Group

eia

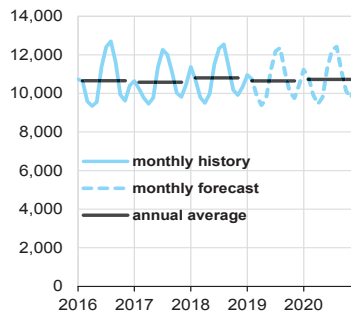
U.S. natural gas prices



Source: Short-Term Energy Outlook, February 2019, and Refinitiv

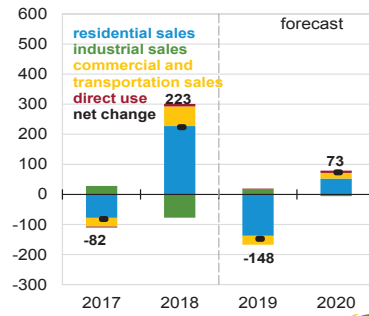
eia

U.S. electricity consumption
million kilowatthours per day



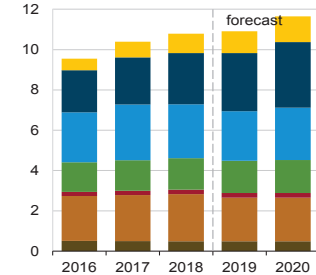
Source: Short-Term Energy Outlook, February 2019

Components of annual change
million kilowatthours per day



eia

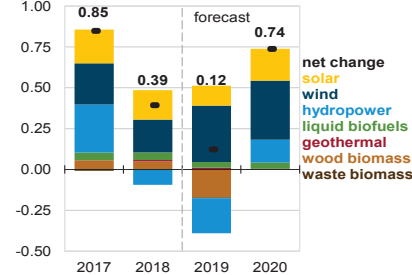
U.S. renewable energy supply
quadrillion British thermal units



Note: Hydropower excludes pumped storage generation. Liquid biofuels include ethanol and biodiesel. Other biomass includes municipal waste from biogenic sources, landfill gas, and other non-wood waste.

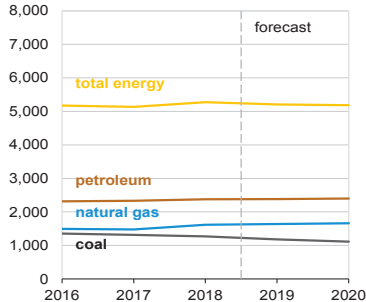
Source: Short-Term Energy Outlook, February 2019

Components of annual change
quadrillion British thermal units



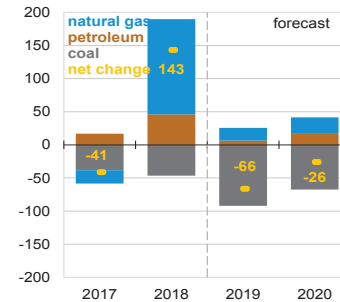
eia

U.S. annual carbon emissions by source
million metric tons



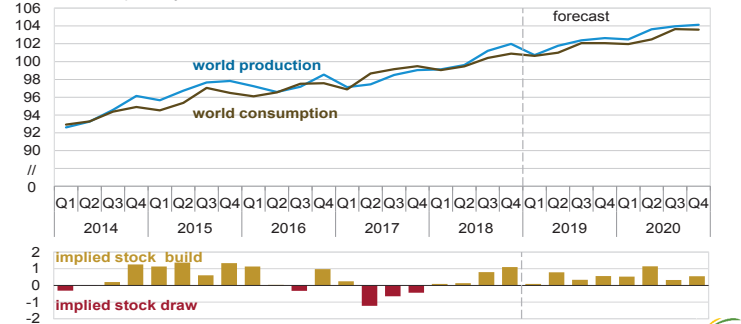
Source: Short-Term Energy Outlook, February 2019

Components of annual change
million metric tons



eia

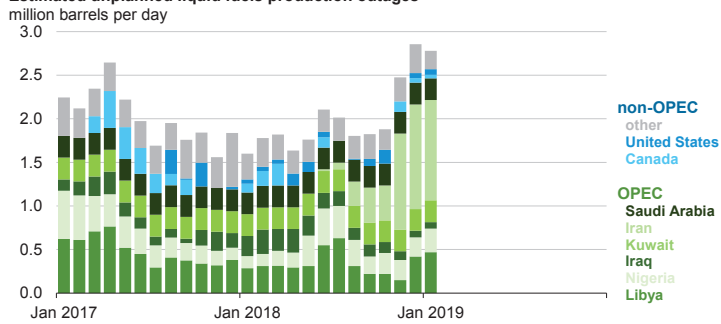
World liquid fuels production and consumption balance
million barrels per day



Source: Short-Term Energy Outlook, February 2019



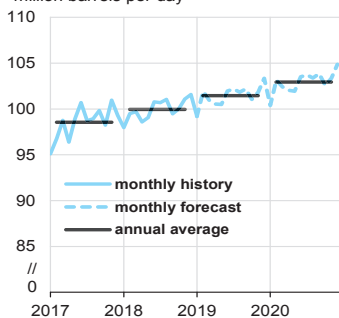
Estimated unplanned liquid fuels production outages
million barrels per day



Source: Short-Term Energy Outlook, February 2019

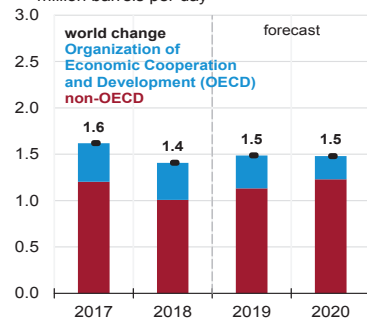


World liquid fuels consumption
million barrels per day



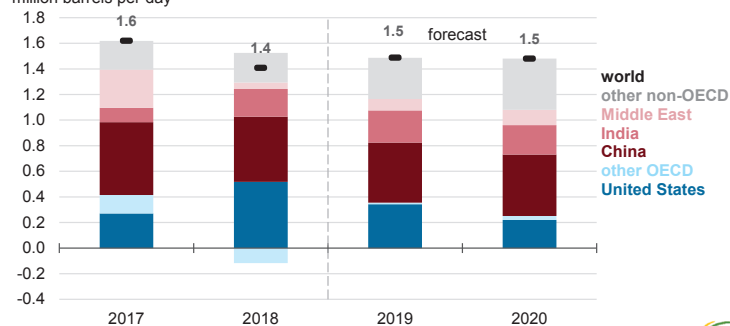
Source: Short-Term Energy Outlook, February 2019

Components of annual change
million barrels per day



Annual change in world liquid fuels consumption

million barrels per day

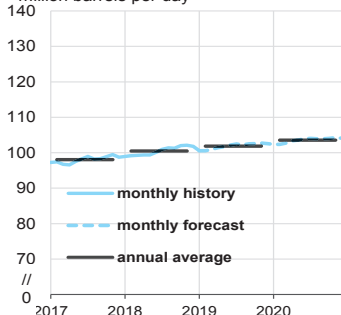


Source: Short-Term Energy Outlook, February 2019



World crude oil and liquid fuels production

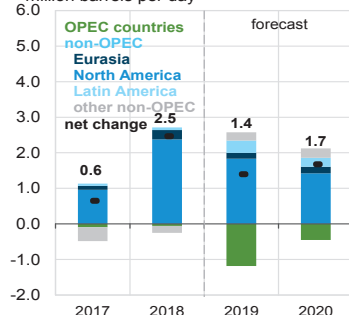
million barrels per day



Source: Short-Term Energy Outlook, February 2019

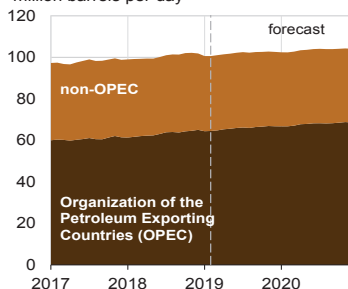
Components of annual change

million barrels per day



World liquid fuels production

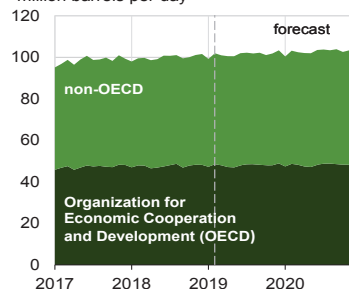
million barrels per day



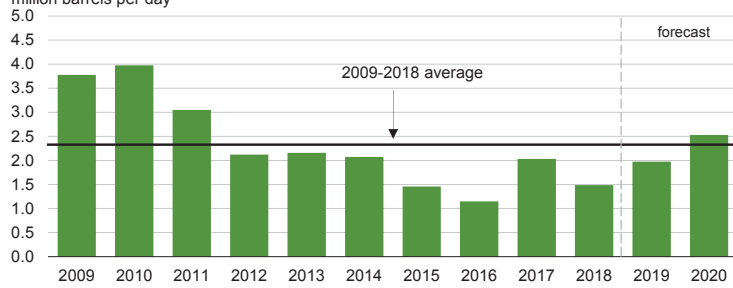
Source: Short-Term Energy Outlook, February 2019

World liquid fuels consumption

million barrels per day



Organization of the Petroleum Exporting Countries (OPEC)
surplus crude oil production capacity

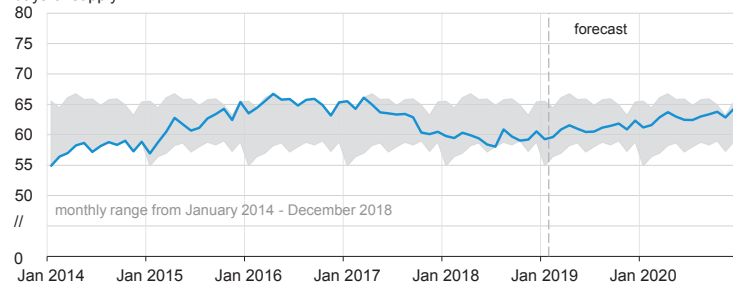


Note: Black line represents 2009-2018 average (2.3 million barrels per day).

Source: Short-Term Energy Outlook, February 2019



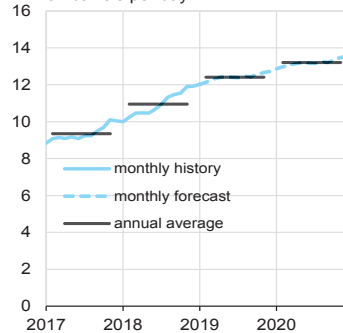
Organization for Economic Cooperation and Development (OECD)
commercial inventories of crude oil and other liquids



Source: Short-Term Energy Outlook, February 2019

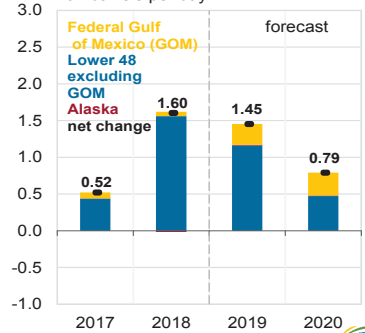


U.S. crude oil production
million barrels per day

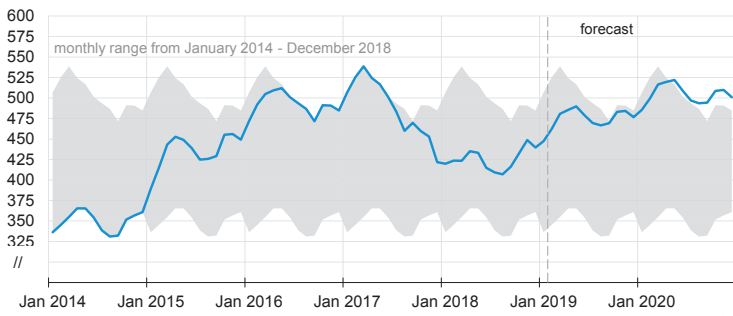


Source: Short-Term Energy Outlook, February 2019

Components of annual change
million barrels per day



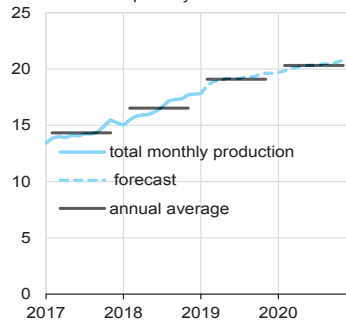
U.S. commercial crude oil inventories



Source: Short-Term Energy Outlook, February 2019

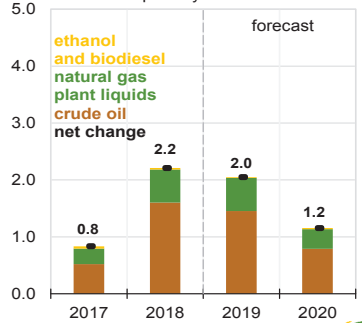


U.S. crude oil and liquid fuels production

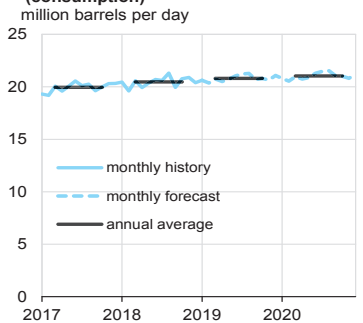


Source: Short-Term Energy Outlook, February 2019

Components of annual change

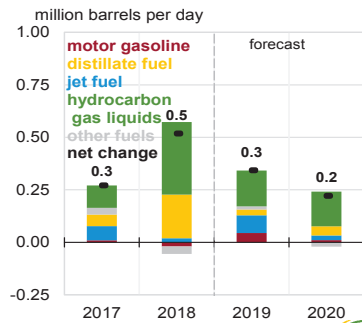


U.S. liquid fuels product supplied (consumption)

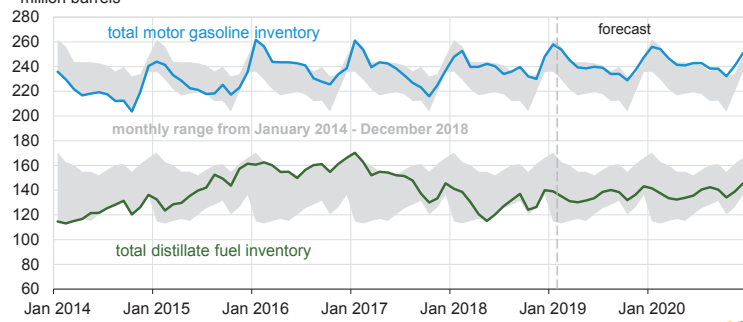


Source: Short-Term Energy Outlook, February 2019

Components of annual change



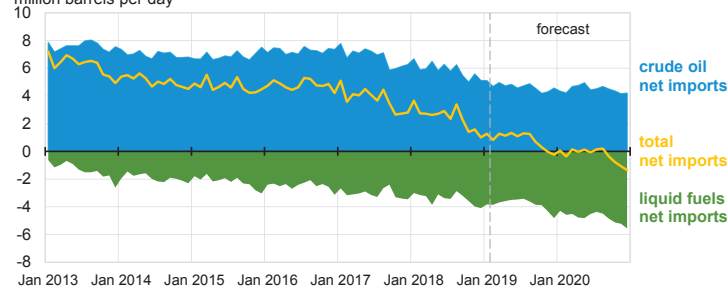
U.S. gasoline and distillate inventories



Source: Short-Term Energy Outlook, February 2019



U.S. net imports of crude oil and liquid fuels

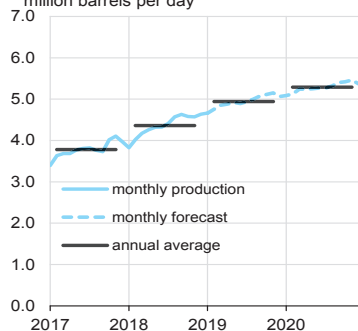


Note: Liquids fuels include: gasoline, distillate fuels, hydrocarbon gas liquids, jet fuel, residual fuel oil, unfinished oils, other hydrocarbons/oxygenates, and other oils.

Source: Short-Term Energy Outlook, February 2019

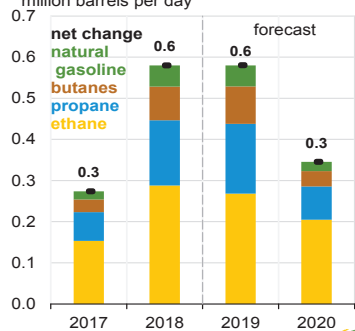


U.S. natural gas plant liquids production

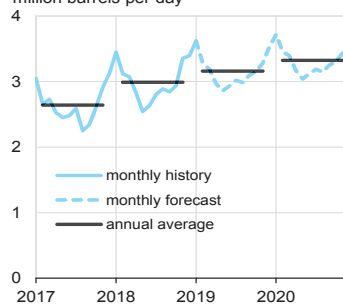


Source: Short-Term Energy Outlook, February 2019

Components of annual change

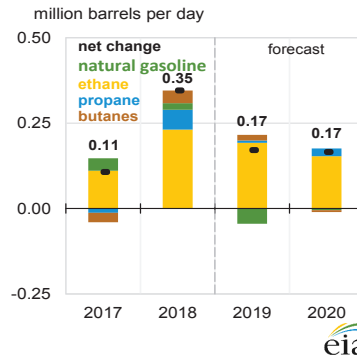


**U.S. hydrocarbon gas liquids
product supplied (consumption)**
million barrels per day



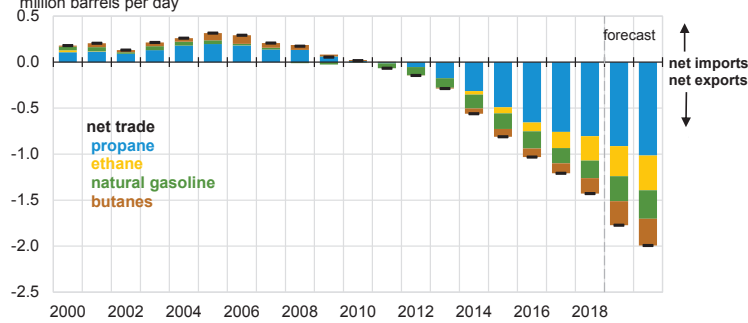
Source: Short-Term Energy Outlook, February 2019

Components of annual change



eia

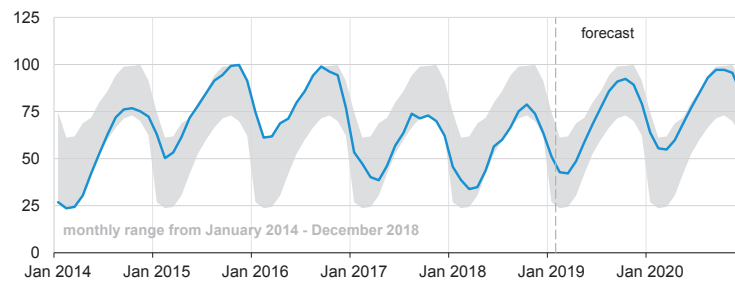
U.S. net trade of hydrocarbon gas liquids (HGL)
million barrels per day



Source: Short-Term Energy Outlook, February 2019

eia

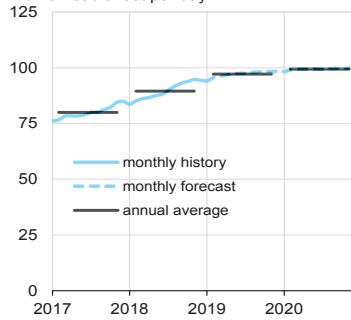
U.S. commercial propane inventories
million barrels



Source: Short-Term Energy Outlook, February 2019

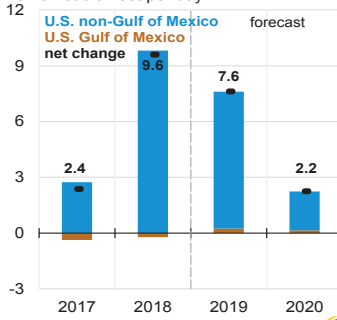
eia

U.S. marketed natural gas production
billion cubic feet per day



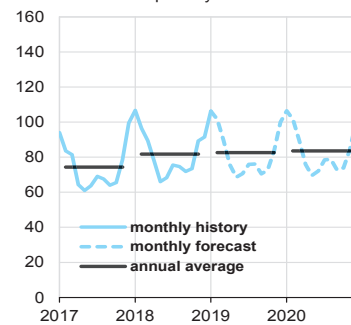
Source: Short-Term Energy Outlook, February 2019

Components of annual change
billion cubic feet per day



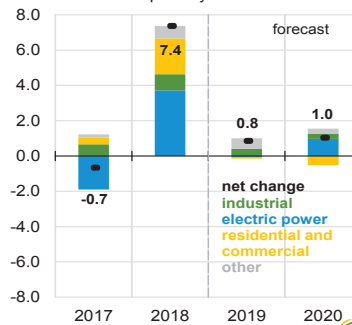
eia

U.S. natural gas consumption
billion cubic feet per day



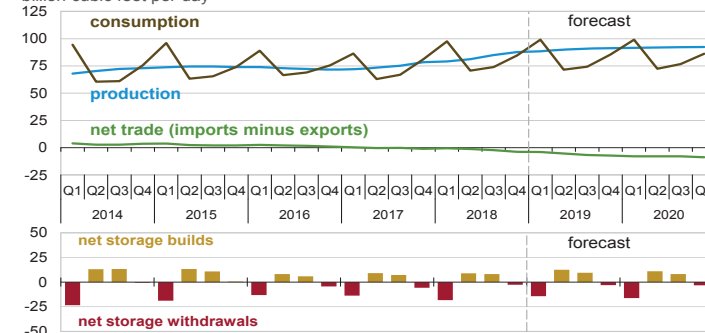
Source: Short-Term Energy Outlook, February 2019

Components of annual change
billion cubic feet per day



eia

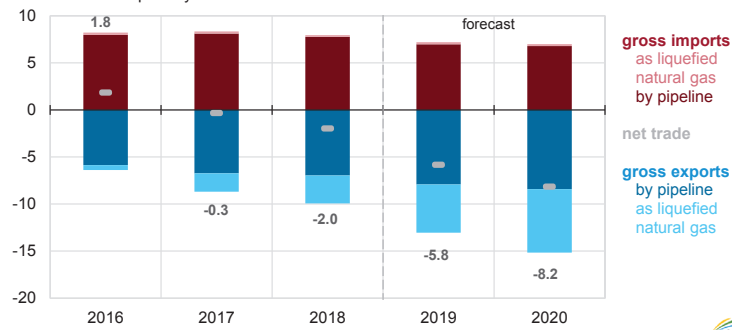
U.S. natural gas production, consumption, and net imports
billion cubic feet per day



Source: Short-Term Energy Outlook, February 2019

eia

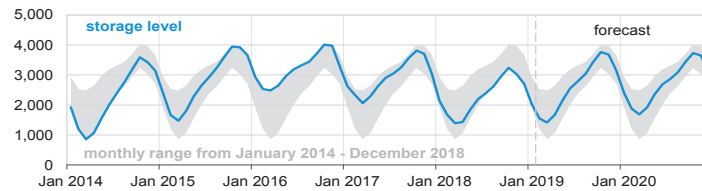
Annual natural gas trade
billion cubic feet per day



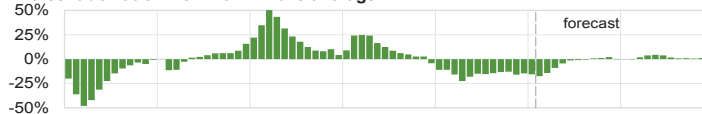
Source: Short-Term Energy Outlook, February 2019



U.S. working natural gas in storage
billion cubic feet



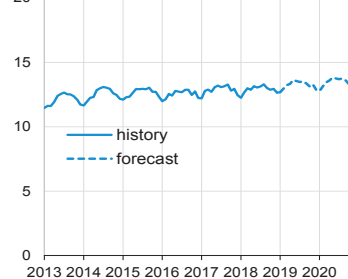
Percent deviation from 2014 - 2018 average



Source: Short-Term Energy Outlook, February 2019

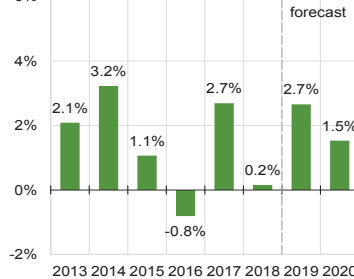


U.S. monthly residential electricity price
cents per kilowatthour

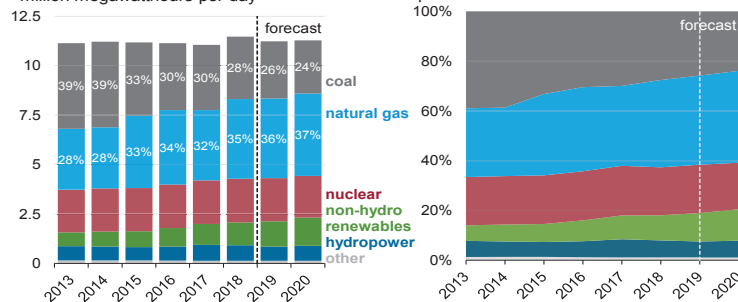


Source: Short-Term Energy Outlook, February 2019

Annual growth in residential electricity prices
percent



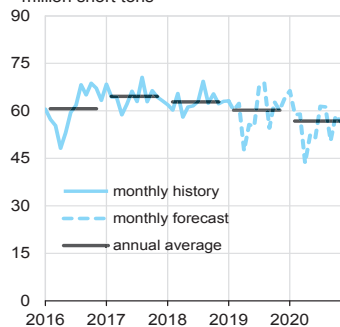
U.S. electricity generation by fuel, all sectors
million megawatthours per day



Note: Labels show percentage share of total generation provided by coal and natural gas.
Source: Short-Term Energy Outlook, February 2019

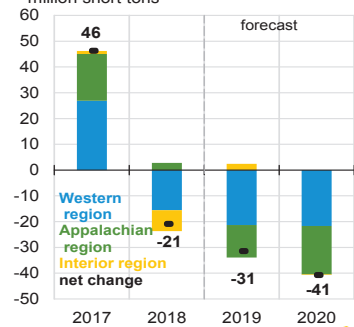


U.S. coal production
million short tons

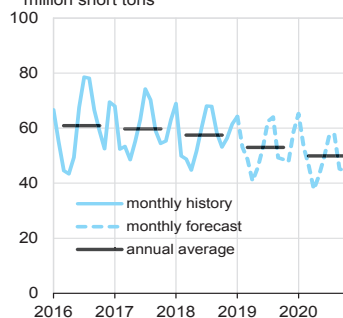


Source: Short-Term Energy Outlook, February 2019

Components of annual change
million short tons

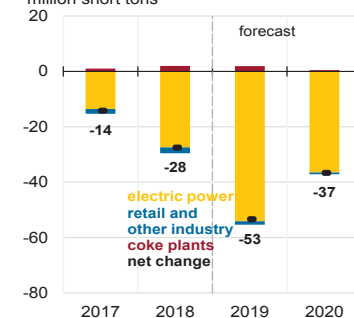


U.S. coal consumption
million short tons

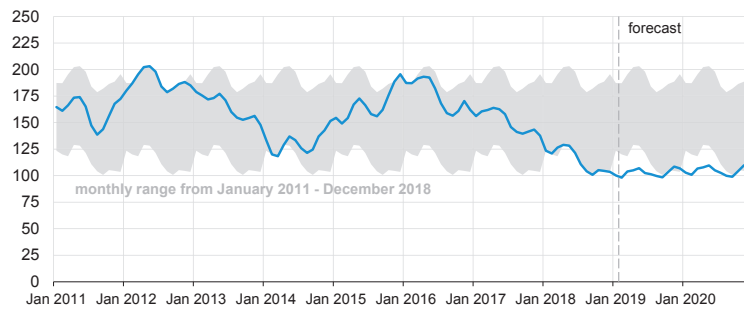


Source: Short-Term Energy Outlook, February 2019

Components of annual change
million short tons



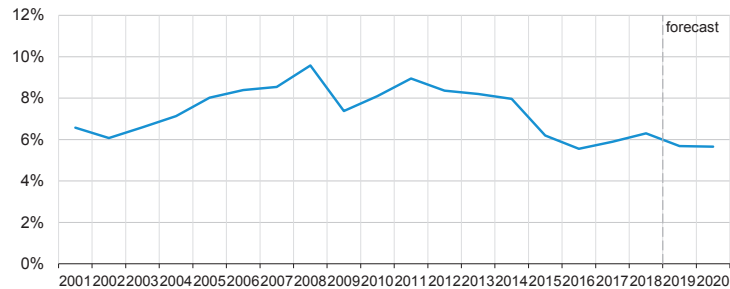
U.S. electric power coal inventories
million short tons



Source: Short-Term Energy Outlook, February 2019



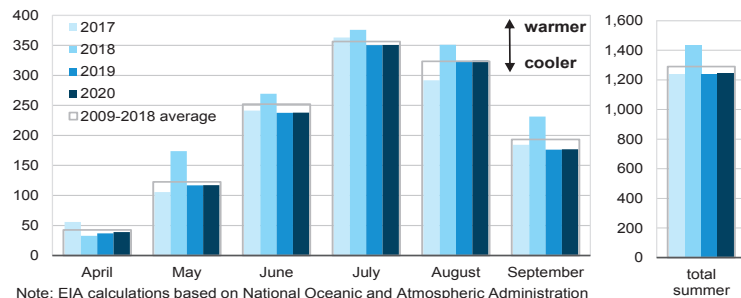
U.S. annual energy expenditures
share of gross domestic product



Source: Short-Term Energy Outlook, February 2019



U.S. summer cooling degree days
population-weighted

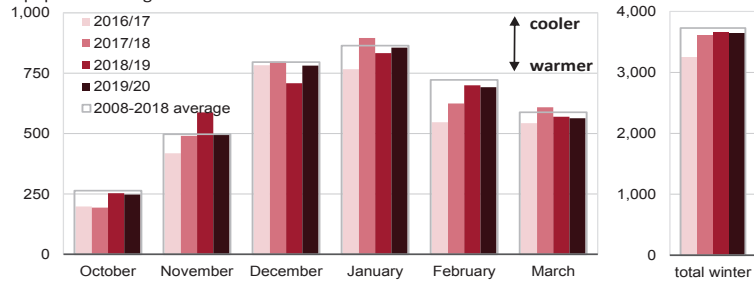


Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, February 2019



U.S. winter heating degree days population-weighted

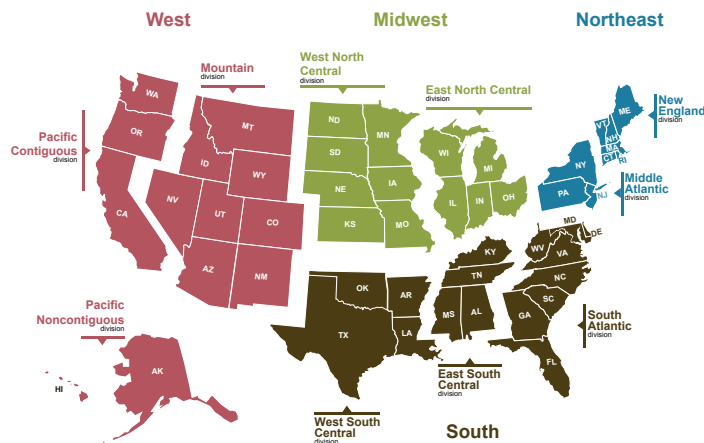


Note: EIA calculations based on National Oceanic and Atmospheric Administration (NOAA) data. Projections reflect NOAA's 14-16 month outlook.

Source: Short-Term Energy Outlook, February 2019



U.S. Census regions and divisions



Source: U.S. Energy Information Administration, *Short-Term Energy Outlook*



Table 1. U.S. Energy Markets Summary

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Energy Supply															
Crude Oil Production (a) (million barrels per day)	10.23	10.54	11.24	11.79	12.15	12.41	12.42	12.65	12.97	13.18	13.20	13.45	10.96	12.41	13.20
Dry Natural Gas Production (billion cubic feet per day)	79.13	81.17	84.96	87.67	88.48	90.16	90.80	91.18	91.63	92.11	92.16	92.31	83.26	90.16	92.05
Coal Production (million short tons)	188	181	195	191	186	158	191	187	184	147	173	177	754	722	681
Energy Consumption															
Liquid Fuels (million barrels per day)	20.24	20.33	20.63	20.69	20.59	20.76	21.07	20.85	20.78	20.98	21.36	21.03	20.47	20.82	21.04
Natural Gas (billion cubic feet per day)	97.54	70.66	74.04	84.71	99.06	71.62	74.22	85.46	99.02	72.46	76.64		81.68	82.53	83.56
Coal (b) (million short tons)	168	157	194	171	166	139	176	155	164	130	161	144	689	636	599
Electricity (billion kilowatt hours per day)	10.61	10.32	12.12	10.15	10.52	10.11	11.89	10.09	10.66	10.17	11.95	10.13	10.80	10.65	10.73
Renewables (c) (quadrillion Btu)	2.92	3.10	2.72	2.79	2.80	3.09	2.82	2.92	3.02	3.29	2.98	3.06	11.53	11.62	12.35
Total Energy Consumption (d) (quadrillion Btu)	26.42	24.05	25.16	25.37	26.12	23.56	24.75	25.22	26.58	23.65	24.86	25.22	101.00	99.64	100.31
Energy Prices															
Crude Oil West Texas Intermediate Spot (dollars per barrel)	62.90	68.07	69.69	59.59	53.10	53.69	54.97	57.33	58.00	58.00	58.00	58.00	65.06	54.79	58.00
Natural Gas Henry Hub Spot (dollars per million Btu)	3.02	2.85	2.93	3.80	2.97	2.69	2.70	2.95	3.04	2.60	2.64	2.91	3.15	2.83	2.80
Coal (dollars per million Btu)	2.06	2.06	2.06	2.07	2.09	2.07	2.06	2.07	2.09	2.08	2.07	2.07	2.06	2.07	2.08
Macroeconomic															
Real Gross Domestic Product (billion chained 2012 dollars - SAAR)	18,324	18,512	18,665	18,798	18,876	19,000	19,121	19,240	19,336	19,420	19,491	19,558	18,575	19,059	19,451
Percent change from prior year	2.6	2.9	3.0	3.2	3.0	2.6	2.4	2.4	2.4	2.2	1.9	1.7	2.9	2.6	2.1
GDP Implicit Price Deflator (Index, 2012=100)	109.3	110.2	110.7	111.2	111.8	112.3	112.9	113.5	114.2	114.9	115.5	116.2	110.3	112.6	115.2
Percent change from prior year	2.0	2.4	2.3	2.2	2.3	1.9	2.0	2.1	2.1	2.3	2.3	2.3	2.2	2.1	2.3
Real Disposable Personal Income (billion chained 2012 dollars - SAAR)	14,220	14,282	14,365	14,472	14,602	14,717	14,808	14,894	14,966	15,056	15,140	15,211	14,335	14,755	15,093
Percent change from prior year	2.8	2.7	2.7	2.9	2.7	3.0	3.1	2.9	2.5	2.3	2.2	2.1	2.8	2.9	2.3
Manufacturing Production Index (Index, 2012=100)	104.1	104.8	105.8	106.1	106.7	107.4	108.3	109.1	109.6	109.8	110.0	110.5	105.2	107.9	110.0
Percent change from prior year	2.1	2.0	3.5	2.4	2.5	2.5	2.4	2.8	2.7	2.2	1.5	1.3	2.5	2.5	1.9
Weather															
U.S. Heating Degree-Days	2,129	522	48	1,549	2,103	486	73	1,525	2,111	486	73	1,523	4,249	4,186	4,192
U.S. Cooling Degree-Days	52	476	958	99	38	391	851	91	43	394	852	91	1,585	1,370	1,380

- = no data available

Prices are not adjusted for inflation.

(a) Includes lease condensate.

(b) Total consumption includes Independent Power Producer (IPP) consumption.

(c) Renewable energy includes minor components of non-marketed renewable energy that is neither bought nor sold, either directly or indirectly, as inputs to marketed energy.

EIA does not estimate or project end-use consumption of non-marketed renewable energy.

(d) The conversion from physical units to Btu is calculated using a subset of conversion factors used in the calculations of gross energy consumption in EIA's Monthly Energy Review. Consequently, the historical data may not precisely match those published in the MER or the Annual Energy Review (AER).

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.**Historical data:** Latest data available from Energy Information Administration databases supporting the following reports: *Petroleum Supply Monthly*, DOE/EIA-0109;*Petroleum Supply Annual*, DOE/EIA-0340/2; *Weekly Petroleum Status Report*, DOE/EIA-0208; *Petroleum Marketing Monthly*, DOE/EIA-0380; *Natural Gas Monthly*, DOE/EIA-0130;*Electric Power Monthly*, DOE/EIA-0226; *Quarterly Coal Report*, DOE/EIA-0121; and *International Petroleum Monthly*, DOE/EIA-0520.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model. U.S. macroeconomic projections are based on the IHS Markit model of the U.S. Economy.

Weather projections from National Oceanic and Atmospheric Administration.

Table 2. Energy Prices

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Crude Oil (dollars per barrel)															
West Texas Intermediate Spot Average	62.90	68.07	69.69	59.59	<i>53.10</i>	<i>53.69</i>	<i>54.97</i>	<i>57.33</i>	<i>58.00</i>	<i>58.00</i>	<i>58.00</i>	<i>58.00</i>	65.06	<i>54.79</i>	<i>58.00</i>
Brent Spot Average	66.84	74.53	75.02	68.29	<i>61.11</i>	<i>61.38</i>	<i>60.31</i>	<i>61.33</i>	<i>62.00</i>	<i>62.00</i>	<i>62.00</i>	<i>62.00</i>	71.19	<i>61.03</i>	<i>62.00</i>
U.S. Imported Average	58.08	64.67	66.20	55.68	<i>50.06</i>	<i>50.18</i>	<i>50.48</i>	<i>51.85</i>	<i>51.50</i>	<i>51.50</i>	<i>51.50</i>	<i>51.50</i>	61.32	<i>50.62</i>	<i>51.50</i>
U.S. Refiner Average Acquisition Cost	61.89	67.29	69.03	58.33	<i>51.84</i>	<i>52.27</i>	<i>53.15</i>	<i>55.15</i>	<i>55.35</i>	<i>55.35</i>	<i>55.35</i>	<i>55.35</i>	64.18	<i>53.11</i>	<i>55.35</i>
U.S. Liquid Fuels (cents per gallon)															
Refiner Prices for Resale															
Gasoline	186	213	213	179	<i>161</i>	<i>181</i>	<i>180</i>	<i>169</i>	<i>177</i>	<i>190</i>	<i>184</i>	<i>169</i>	198	<i>173</i>	<i>180</i>
Diesel Fuel	199	219	222	214	<i>189</i>	<i>190</i>	<i>193</i>	<i>201</i>	<i>208</i>	<i>214</i>	<i>214</i>	<i>213</i>	214	<i>193</i>	<i>212</i>
Heating Oil	193	205	214	202	<i>186</i>	<i>180</i>	<i>184</i>	<i>194</i>	<i>204</i>	<i>203</i>	<i>204</i>	<i>206</i>	200	<i>187</i>	<i>204</i>
Refiner Prices to End Users															
Jet Fuel	197	217	220	213	<i>187</i>	<i>186</i>	<i>190</i>	<i>198</i>	<i>206</i>	<i>210</i>	<i>210</i>	<i>209</i>	212	<i>191</i>	<i>209</i>
No. 6 Residual Fuel Oil (a)	149	162	176	170	<i>131</i>	<i>128</i>	<i>131</i>	<i>122</i>	<i>112</i>	<i>110</i>	<i>111</i>	<i>111</i>	165	<i>128</i>	<i>111</i>
Retail Prices Including Taxes															
Gasoline Regular Grade (b)	258	285	284	263	<i>232</i>	<i>255</i>	<i>256</i>	<i>246</i>	<i>249</i>	<i>265</i>	<i>262</i>	<i>246</i>	273	<i>247</i>	<i>256</i>
Gasoline All Grades (b)	270	294	292	271	<i>242</i>	<i>266</i>	<i>267</i>	<i>258</i>	<i>261</i>	<i>278</i>	<i>274</i>	<i>259</i>	282	<i>258</i>	<i>268</i>
On-highway Diesel Fuel	302	320	324	327	<i>293</i>	<i>291</i>	<i>293</i>	<i>304</i>	<i>309</i>	<i>316</i>	<i>316</i>	<i>318</i>	318	<i>295</i>	<i>315</i>
Heating Oil	287	299	325	315	<i>293</i>	<i>275</i>	<i>273</i>	<i>287</i>	<i>301</i>	<i>294</i>	<i>294</i>	<i>302</i>	302	<i>286</i>	<i>299</i>
Natural Gas															
Henry Hub Spot (dollars per thousand cubic feet)	3.13	2.96	3.04	3.94	<i>3.08</i>	<i>2.79</i>	<i>2.80</i>	<i>3.06</i>	<i>3.15</i>	<i>2.69</i>	<i>2.74</i>	<i>3.01</i>	3.27	<i>2.93</i>	<i>2.90</i>
Henry Hub Spot (dollars per million Btu)	3.02	2.85	2.93	3.80	<i>2.97</i>	<i>2.69</i>	<i>2.70</i>	<i>2.95</i>	<i>3.04</i>	<i>2.60</i>	<i>2.64</i>	<i>2.91</i>	3.15	<i>2.83</i>	<i>2.80</i>
U.S. Retail Prices (dollars per thousand cubic feet)															
Industrial Sector	4.44	3.83	3.73	4.72	<i>4.66</i>	<i>3.78</i>	<i>3.71</i>	<i>4.19</i>	<i>4.54</i>	<i>3.70</i>	<i>3.62</i>	<i>4.11</i>	4.21	<i>4.11</i>	<i>4.02</i>
Commercial Sector	7.64	8.05	8.77	7.64	<i>7.91</i>	<i>8.13</i>	<i>8.46</i>	<i>7.75</i>	<i>7.74</i>	<i>8.13</i>	<i>8.43</i>	<i>7.69</i>	7.83	<i>7.96</i>	<i>7.87</i>
Residential Sector	9.37	11.94	17.93	9.98	<i>9.70</i>	<i>11.96</i>	<i>16.59</i>	<i>10.69</i>	<i>9.88</i>	<i>12.26</i>	<i>16.75</i>	<i>10.68</i>	10.50	<i>10.79</i>	<i>10.92</i>
U.S. Electricity															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.06	2.06	2.06	2.07	<i>2.09</i>	<i>2.07</i>	<i>2.06</i>	<i>2.07</i>	<i>2.09</i>	<i>2.08</i>	<i>2.07</i>	<i>2.07</i>	2.06	<i>2.07</i>	<i>2.08</i>
Natural Gas	3.96	3.09	3.23	3.99	<i>3.49</i>	<i>2.85</i>	<i>2.77</i>	<i>3.29</i>	<i>3.55</i>	<i>2.73</i>	<i>2.63</i>	<i>3.18</i>	3.52	<i>3.06</i>	<i>2.97</i>
Residual Fuel Oil (c)	11.47	13.02	13.87	14.17	<i>12.25</i>	<i>12.73</i>	<i>11.74</i>	<i>11.53</i>	<i>12.08</i>	<i>12.88</i>	<i>12.19</i>	<i>11.96</i>	12.86	<i>12.07</i>	<i>12.25</i>
Distillate Fuel Oil	15.77	16.61	16.82	16.29	<i>14.81</i>	<i>14.82</i>	<i>14.93</i>	<i>15.65</i>	<i>16.15</i>	<i>16.59</i>	<i>16.51</i>	<i>16.59</i>	16.17	<i>15.05</i>	<i>16.43</i>
Retail Prices (cents per kilowatthour)															
Industrial Sector	6.81	6.87	7.23	6.83	<i>6.77</i>	<i>6.90</i>	<i>7.26</i>	<i>6.85</i>	<i>6.79</i>	<i>6.98</i>	<i>7.35</i>	<i>6.94</i>	6.94	<i>6.95</i>	<i>7.02</i>
Commercial Sector	10.54	10.59	10.89	10.57	<i>10.60</i>	<i>10.64</i>	<i>10.87</i>	<i>10.54</i>	<i>10.57</i>	<i>10.54</i>	<i>10.82</i>	<i>10.58</i>	10.66	<i>10.67</i>	<i>10.63</i>
Residential Sector	12.59	13.03	13.15	12.81	<i>12.94</i>	<i>13.51</i>	<i>13.46</i>	<i>13.08</i>	<i>13.08</i>	<i>13.73</i>	<i>13.68</i>	<i>13.31</i>	12.91	<i>13.25</i>	<i>13.45</i>

- = no data available

Prices are not adjusted for inflation.

(a) Average for all sulfur contents.

(b) Average self-service cash price.

(c) Includes fuel oils No. 4, No. 5, No. 6, and topped crude.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Prices exclude taxes unless otherwise noted.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: *Petroleum Marketing Monthly*, DOE/EIA-0380;

Weekly Petroleum Status Report, DOE/EIA-0208; *Natural Gas Monthly*, DOE/EIA-0130; *Electric Power Monthly*, DOE/EIA-0226; and *Monthly Energy Review*, DOE/EIA-0035.

 WTI and Brent crude oils, and Henry Hub natural gas spot prices from Reuter's News Service (<http://www.reuters.com>).

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 3a. International Petroleum and Other Liquids Production, Consumption, and Inventories

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Supply (million barrels per day) (a)															
OECD	29.14	29.27	30.40	31.00	31.15	31.75	31.91	32.55	33.04	33.48	33.57	34.22	29.96	31.84	33.58
U.S. (50 States)	16.77	17.39	18.40	18.96	19.40	19.88	20.02	20.40	20.73	21.16	21.28	21.62	17.89	19.93	21.20
Canada	5.32	5.10	5.32	5.24	4.92	5.13	5.20	5.25	5.33	5.32	5.37	5.42	5.24	5.13	5.36
Mexico	2.18	2.14	2.10	2.06	2.07	2.04	2.02	2.00	1.98	1.96	1.94	1.92	2.12	2.03	1.95
Other OECD	4.88	4.64	4.57	4.74	4.76	4.70	4.66	4.90	5.00	5.03	4.98	5.26	4.71	4.76	5.07
Non-OECD	69.99	70.34	70.81	70.98	69.58	70.02	70.49	70.09	69.45	70.15	70.40	69.92	70.54	70.05	69.98
OPEC	37.43	37.04	37.32	37.32	36.16	36.15	36.20	35.88	35.63	35.67	35.77	35.51	37.28	36.10	35.65
Crude Oil Portion	32.10	31.78	32.02	31.96	30.71	30.76	30.87	30.59	30.42	30.51	30.65	30.38	31.97	30.74	30.49
Other Liquids (b)	5.33	5.26	5.30	5.36	5.45	5.38	5.33	5.29	5.21	5.16	5.11	5.14	5.31	5.36	5.16
Eurasia	14.41	14.43	14.62	14.87	14.82	14.49	14.73	14.95	14.97	14.88	14.87	14.96	14.58	14.75	14.92
China	4.75	4.80	4.74	4.82	4.77	4.80	4.80	4.85	4.79	4.81	4.82	4.86	4.78	4.81	4.82
Other Non-OECD	13.40	14.07	14.14	13.96	13.83	14.58	14.76	14.41	14.06	14.79	14.95	14.59	13.90	14.40	14.60
Total World Supply	99.13	99.61	101.21	101.99	100.73	101.77	102.40	102.64	102.49	103.63	103.97	104.14	100.49	101.89	103.56
Non-OPEC Supply	61.70	62.57	63.89	64.66	64.57	65.63	66.20	66.76	66.86	67.95	68.21	68.63	63.22	65.79	67.92
Consumption (million barrels per day) (c)															
OECD	47.58	46.94	47.89	48.10	47.91	47.34	48.37	48.32	48.10	47.58	48.70	48.54	47.63	47.99	48.24
U.S. (50 States)	20.24	20.33	20.63	20.69	20.59	20.76	21.07	20.85	20.78	20.98	21.36	21.03	20.47	20.82	21.04
U.S. Territories	0.10	0.08	0.09	0.11	0.12	0.11	0.12	0.13	0.12	0.11	0.12	0.13	0.10	0.12	0.12
Canada	2.32	2.34	2.56	2.52	2.41	2.36	2.47	2.44	2.42	2.36	2.46	2.44	2.44	2.42	2.42
Europe	14.05	14.19	14.65	14.28	14.04	14.26	14.77	14.46	14.13	14.34	14.86	14.55	14.29	14.38	14.47
Japan	4.27	3.43	3.53	3.91	4.15	3.40	3.47	3.79	4.05	3.32	3.39	3.73	3.79	3.70	3.62
Other OECD	6.60	6.57	6.42	6.60	6.60	6.46	6.49	6.64	6.61	6.48	6.51	6.66	6.55	6.55	6.57
Non-OECD	51.46	52.53	52.53	52.79	52.74	53.65	53.70	53.75	53.86	54.90	54.95	55.05	52.33	53.46	54.69
Eurasia	4.78	4.83	5.11	4.98	4.80	4.87	5.24	5.09	4.90	4.97	5.36	5.20	4.93	5.00	5.11
Europe	0.75	0.74	0.76	0.76	0.75	0.75	0.77	0.77	0.76	0.76	0.78	0.78	0.75	0.76	0.77
China	13.80	14.00	13.73	13.95	14.28	14.47	14.20	14.41	14.76	14.95	14.67	14.90	13.87	14.34	14.82
Other Asia	13.48	13.72	13.32	13.67	13.96	14.12	13.71	14.04	14.36	14.52	14.10	14.44	13.55	13.96	14.35
Other Non-OECD	18.65	19.24	19.61	19.42	18.94	19.43	19.77	19.44	19.07	19.69	20.05	19.73	19.23	19.40	19.64
Total World Consumption	99.04	99.47	100.42	100.89	100.64	100.99	102.06	102.07	101.96	102.49	103.65	103.60	99.96	101.45	102.93
Total Crude Oil and Other Liquids Inventory Net Withdrawals (million barrels per day)															
U.S. (50 States)	0.36	-0.06	-0.70	0.25	-0.08	-0.49	-0.24	0.29	-0.09	-0.38	-0.14	0.32	-0.04	-0.13	-0.07
Other OECD	-0.03	0.11	0.18	-0.15	0.00	-0.10	-0.03	-0.29	-0.15	-0.25	-0.06	-0.29	0.03	-0.10	-0.19
Other Stock Draws and Balance	-0.42	-0.19	-0.28	-1.20	0.00	-0.20	-0.06	-0.56	-0.29	-0.51	-0.12	-0.58	-0.52	-0.21	-0.38
Total Stock Draw	-0.09	-0.14	-0.79	-1.10	-0.08	-0.78	-0.33	-0.56	-0.53	-1.14	-0.32	-0.55	-0.53	-0.44	-0.63
End-of-period Commercial Crude Oil and Other Liquids Inventories (million barrels)															
U.S. Commercial Inventory	1,196	1,207	1,272	1,259	1,267	1,316	1,339	1,315	1,327	1,365	1,379	1,352	1,259	1,315	1,352
OECD Commercial Inventory	2,806	2,806	2,858	2,863	2,870	2,929	2,954	2,957	2,982	3,043	3,062	3,062	2,863	2,957	3,062

- = no data available

OECD = Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Latvia, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, the United States.

OPEC = Organization of the Petroleum Exporting Countries: Algeria, Angola, Congo (Brazzaville), Ecuador, Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Saudi Arabia, the United Arab Emirates,

(a) Supply includes production of crude oil (including lease condensates), natural gas plant liquids, biofuels, other liquids, and refinery processing gains.

(b) Includes lease condensate, natural gas plant liquids, other liquids, and refinery processing gain. Includes other unaccounted-for liquids.

(c) Consumption of petroleum by the OECD countries is synonymous with "petroleum product supplied," defined in the glossary of the *EIA Petroleum Supply Monthly*, DOE/EIA-0109.

Consumption of petroleum by the non-OECD countries is "apparent consumption," which includes internal consumption, refinery fuel and loss, and bunkering.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Historical data: Latest data available from Energy Information Administration international energy statistics.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 3b. Non-OPEC Petroleum and Other Liquids Supply (million barrels per day)

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
North America	24.26	24.63	25.82	26.26	<i>26.39</i>	<i>27.05</i>	<i>27.24</i>	<i>27.65</i>	<i>28.04</i>	<i>28.44</i>	<i>28.59</i>	<i>28.96</i>	25.25	<i>27.09</i>	<i>28.51</i>
Canada	5.32	5.10	5.32	5.24	<i>4.92</i>	<i>5.13</i>	<i>5.20</i>	<i>5.25</i>	<i>5.33</i>	<i>5.32</i>	<i>5.37</i>	<i>5.42</i>	5.24	<i>5.13</i>	<i>5.36</i>
Mexico	2.18	2.14	2.10	2.06	<i>2.07</i>	<i>2.04</i>	<i>2.02</i>	<i>2.00</i>	<i>1.98</i>	<i>1.96</i>	<i>1.94</i>	<i>1.92</i>	2.12	<i>2.03</i>	<i>1.95</i>
United States	16.77	17.39	18.40	18.96	<i>19.40</i>	<i>19.88</i>	<i>20.02</i>	<i>20.40</i>	<i>20.73</i>	<i>21.16</i>	<i>21.28</i>	<i>21.62</i>	17.89	<i>19.93</i>	<i>21.20</i>
Central and South America	4.89	5.64	5.72	5.42	<i>5.17</i>	<i>5.94</i>	<i>6.14</i>	<i>5.81</i>	<i>5.44</i>	<i>6.20</i>	<i>6.40</i>	<i>6.06</i>	5.42	<i>5.77</i>	<i>6.02</i>
Argentina	0.67	0.69	0.68	0.71	<i>0.66</i>	<i>0.68</i>	<i>0.68</i>	<i>0.70</i>	<i>0.67</i>	<i>0.69</i>	<i>0.69</i>	<i>0.71</i>	0.69	<i>0.68</i>	<i>0.69</i>
Brazil	2.95	3.64	3.75	3.39	<i>3.24</i>	<i>3.95</i>	<i>4.19</i>	<i>3.79</i>	<i>3.50</i>	<i>4.22</i>	<i>4.44</i>	<i>4.04</i>	3.43	<i>3.80</i>	<i>4.05</i>
Colombia	0.86	0.89	0.89	0.91	<i>0.87</i>	<i>0.89</i>	<i>0.88</i>	<i>0.90</i>	<i>0.86</i>	<i>0.88</i>	<i>0.88</i>	<i>0.90</i>	0.89	<i>0.89</i>	<i>0.88</i>
Other Central and S. America	0.41	0.42	0.40	0.42	<i>0.41</i>	<i>0.41</i>	<i>0.39</i>	<i>0.41</i>	<i>0.40</i>	<i>0.41</i>	<i>0.39</i>	<i>0.41</i>	0.41	<i>0.41</i>	<i>0.40</i>
Europe	4.36	4.14	4.04	4.24	<i>4.26</i>	<i>4.18</i>	<i>4.12</i>	<i>4.34</i>	<i>4.41</i>	<i>4.43</i>	<i>4.37</i>	<i>4.65</i>	4.19	<i>4.22</i>	<i>4.46</i>
Norway	1.97	1.80	1.80	1.89	<i>1.88</i>	<i>1.80</i>	<i>1.82</i>	<i>1.87</i>	<i>1.93</i>	<i>1.96</i>	<i>2.02</i>	<i>2.20</i>	1.87	<i>1.84</i>	<i>2.03</i>
United Kingdom	1.13	1.10	1.01	1.10	<i>1.15</i>	<i>1.16</i>	<i>1.08</i>	<i>1.21</i>	<i>1.23</i>	<i>1.24</i>	<i>1.11</i>	<i>1.20</i>	1.09	<i>1.15</i>	<i>1.20</i>
Eurasia	14.41	14.43	14.62	14.87	<i>14.82</i>	<i>14.49</i>	<i>14.73</i>	<i>14.95</i>	<i>14.97</i>	<i>14.88</i>	<i>14.87</i>	<i>14.96</i>	14.58	<i>14.75</i>	<i>14.92</i>
Azerbaijan	0.82	0.81	0.79	0.79	<i>0.79</i>	<i>0.79</i>	<i>0.78</i>	<i>0.76</i>	<i>0.77</i>	<i>0.77</i>	<i>0.75</i>	<i>0.73</i>	0.80	<i>0.78</i>	<i>0.76</i>
Kazakhstan	1.98	1.96	1.90	2.01	<i>2.07</i>	<i>1.87</i>	<i>2.07</i>	<i>2.15</i>	<i>2.16</i>	<i>2.05</i>	<i>2.06</i>	<i>2.14</i>	1.96	<i>2.04</i>	<i>2.10</i>
Russia	11.19	11.23	11.49	11.63	<i>11.54</i>	<i>11.41</i>	<i>11.47</i>	<i>11.63</i>	<i>11.65</i>	<i>11.67</i>	<i>11.67</i>	<i>11.70</i>	11.39	<i>11.51</i>	<i>11.67</i>
Turkmenistan	0.27	0.28	0.28	0.27	<i>0.25</i>	<i>0.25</i>	<i>0.25</i>	<i>0.25</i>	<i>0.24</i>	<i>0.24</i>	<i>0.24</i>	<i>0.24</i>	0.28	<i>0.25</i>	<i>0.24</i>
Other Eurasia	0.16	0.15	0.15	0.16	<i>0.16</i>	<i>0.16</i>	<i>0.16</i>	<i>0.16</i>	<i>0.15</i>	<i>0.15</i>	<i>0.15</i>	<i>0.15</i>	0.16	<i>0.16</i>	<i>0.15</i>
Middle East	3.02	3.03	3.04	3.04	<i>3.13</i>	<i>3.13</i>	<i>3.13</i>	<i>3.13</i>	<i>3.18</i>	<i>3.18</i>	<i>3.19</i>	<i>3.19</i>	3.03	<i>3.13</i>	<i>3.19</i>
Oman	0.98	0.98	0.99	0.99	<i>0.99</i>	<i>0.99</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.00</i>	<i>1.01</i>	<i>1.01</i>	0.98	<i>1.00</i>	<i>1.01</i>
Qatar	1.94	1.94	1.95	1.93	<i>2.00</i>	<i>2.00</i>	<i>2.00</i>	<i>2.00</i>	<i>2.06</i>	<i>2.06</i>	<i>2.06</i>	<i>2.06</i>	1.94	<i>2.00</i>	<i>2.06</i>
Asia and Oceania	9.25	9.20	9.13	9.30	<i>9.27</i>	<i>9.30</i>	<i>9.30</i>	<i>9.34</i>	<i>9.32</i>	<i>9.33</i>	<i>9.30</i>	<i>9.31</i>	9.22	<i>9.30</i>	<i>9.31</i>
Australia	0.37	0.35	0.38	0.42	<i>0.44</i>	<i>0.46</i>	<i>0.49</i>	<i>0.51</i>	<i>0.53</i>	<i>0.55</i>	<i>0.55</i>	<i>0.55</i>	0.38	<i>0.48</i>	<i>0.55</i>
China	4.75	4.80	4.74	4.82	<i>4.77</i>	<i>4.80</i>	<i>4.80</i>	<i>4.85</i>	<i>4.79</i>	<i>4.81</i>	<i>4.82</i>	<i>4.86</i>	4.78	<i>4.81</i>	<i>4.82</i>
India	1.01	1.01	0.99	0.97	<i>0.98</i>	<i>0.97</i>	<i>0.96</i>	<i>0.96</i>	<i>0.99</i>	<i>0.98</i>	<i>0.97</i>	<i>0.97</i>	0.99	<i>0.97</i>	<i>0.98</i>
Indonesia	0.89	0.89	0.88	0.89	<i>0.89</i>	<i>0.88</i>	<i>0.86</i>	<i>0.85</i>	<i>0.84</i>	<i>0.83</i>	<i>0.81</i>	<i>0.80</i>	0.89	<i>0.87</i>	<i>0.82</i>
Malaysia	0.77	0.74	0.72	0.74	<i>0.74</i>	<i>0.74</i>	<i>0.73</i>	<i>0.72</i>	<i>0.72</i>	<i>0.71</i>	<i>0.70</i>	<i>0.68</i>	0.74	<i>0.73</i>	<i>0.70</i>
Vietnam	0.27	0.25	0.25	0.25	<i>0.24</i>	<i>0.24</i>	<i>0.24</i>	<i>0.24</i>	<i>0.24</i>	<i>0.24</i>	<i>0.23</i>	<i>0.23</i>	0.25	<i>0.24</i>	<i>0.24</i>
Africa	1.51	1.50	1.52	1.53	<i>1.52</i>	<i>1.54</i>	<i>1.54</i>	<i>1.54</i>	<i>1.50</i>	<i>1.50</i>	<i>1.50</i>	<i>1.50</i>	1.52	<i>1.53</i>	<i>1.50</i>
Egypt	0.66	0.66	0.66	0.66	<i>0.61</i>	<i>0.61</i>	<i>0.61</i>	<i>0.61</i>	<i>0.59</i>	<i>0.59</i>	<i>0.59</i>	<i>0.59</i>	0.66	<i>0.61</i>	<i>0.59</i>
South Sudan	0.12	0.12	0.12	0.14	<i>0.17</i>	<i>0.18</i>	<i>0.18</i>	<i>0.18</i>	<i>0.18</i>	<i>0.18</i>	<i>0.18</i>	<i>0.18</i>	0.13	<i>0.18</i>	<i>0.18</i>
Total non-OPEC liquids	61.70	62.57	63.89	64.66	<i>64.57</i>	<i>65.63</i>	<i>66.20</i>	<i>66.76</i>	<i>66.86</i>	<i>67.95</i>	<i>68.21</i>	<i>68.63</i>	63.22	<i>65.79</i>	<i>67.92</i>
OPEC non-crude liquids	5.33	5.26	5.30	5.36	<i>5.45</i>	<i>5.38</i>	<i>5.33</i>	<i>5.29</i>	<i>5.21</i>	<i>5.16</i>	<i>5.11</i>	<i>5.14</i>	5.31	<i>5.36</i>	<i>5.16</i>
Non-OPEC + OPEC non-crude	67.03	67.83	69.19	70.03	<i>70.01</i>	<i>71.01</i>	<i>71.52</i>	<i>72.04</i>	<i>72.07</i>	<i>73.11</i>	<i>73.32</i>	<i>73.77</i>	68.53	<i>71.15</i>	<i>73.07</i>
Unplanned non-OPEC Production Outages	0.53	0.40	0.30	0.41	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	0.41	<i>n/a</i>	<i>n/a</i>

- = no data available

OPEC = Organization of the Petroleum Exporting Countries: Algeria, Angola, Congo (Brazzaville), Ecuador, Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Saudi Arabia, the United Arab Emirates,

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Supply includes production of crude oil (including lease condensates), natural gas plant liquids, biofuels, other liquids, and refinery processing gains.

Not all countries are shown in each region and sum of reported country volumes may not equal regional volumes.

Historical data: Latest data available from Energy Information Administration international energy statistics.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 3c. OPEC Crude Oil (excluding condensates) Supply (million barrels per day)

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Crude Oil															
Algeria	1.02	1.02	1.03	1.00	-	-	-	-	-	-	-	-	1.02	-	-
Angola	1.59	1.56	1.56	1.57	-	-	-	-	-	-	-	-	1.57	-	-
Congo (Brazzaville)	0.34	0.35	0.33	0.32	-	-	-	-	-	-	-	-	0.34	-	-
Ecuador	0.51	0.52	0.52	0.52	-	-	-	-	-	-	-	-	0.52	-	-
Equatorial Guinea	0.14	0.13	0.14	0.12	-	-	-	-	-	-	-	-	0.13	-	-
Gabon	0.20	0.20	0.19	0.19	-	-	-	-	-	-	-	-	0.20	-	-
Iran	3.83	3.80	3.55	2.90	-	-	-	-	-	-	-	-	3.52	-	-
Iraq	4.46	4.50	4.66	4.77	-	-	-	-	-	-	-	-	4.60	-	-
Kuwait	2.71	2.71	2.80	2.80	-	-	-	-	-	-	-	-	2.76	-	-
Libya	1.00	0.92	0.91	1.04	-	-	-	-	-	-	-	-	0.96	-	-
Nigeria	1.72	1.53	1.55	1.61	-	-	-	-	-	-	-	-	1.60	-	-
Saudi Arabia	10.10	10.20	10.47	10.74	-	-	-	-	-	-	-	-	10.38	-	-
United Arab Emirates	2.88	2.86	2.94	3.11	-	-	-	-	-	-	-	-	2.95	-	-
Venezuela	1.60	1.49	1.36	1.27	-	-	-	-	-	-	-	-	1.43	-	-
OPEC Total	32.10	31.78	32.02	31.96	<i>30.71</i>	<i>30.76</i>	<i>30.87</i>	<i>30.59</i>	<i>30.42</i>	<i>30.51</i>	<i>30.65</i>	<i>30.38</i>	31.97	<i>30.74</i>	<i>30.49</i>
Other Liquids (a)	5.33	5.26	5.30	5.36	<i>5.45</i>	<i>5.38</i>	<i>5.33</i>	<i>5.29</i>	<i>5.21</i>	<i>5.16</i>	<i>5.11</i>	<i>5.14</i>	5.31	<i>5.36</i>	<i>5.16</i>
Total OPEC Supply	37.43	37.04	37.32	37.32	<i>36.16</i>	<i>36.15</i>	<i>36.20</i>	<i>35.88</i>	<i>35.63</i>	<i>35.67</i>	<i>35.77</i>	<i>35.51</i>	37.28	<i>36.10</i>	<i>35.65</i>
Crude Oil Production Capacity															
Africa	6.00	5.70	5.72	5.86	<i>5.67</i>	<i>5.87</i>	<i>5.91</i>	<i>5.95</i>	<i>6.01</i>	<i>6.06</i>	<i>6.11</i>	<i>6.15</i>	5.82	<i>5.85</i>	<i>6.08</i>
Middle East	25.84	25.85	25.76	25.29	<i>25.51</i>	<i>25.43</i>	<i>25.43</i>	<i>25.43</i>	<i>25.87</i>	<i>25.91</i>	<i>25.92</i>	<i>25.93</i>	25.68	<i>25.45</i>	<i>25.91</i>
South America	2.11	2.01	1.89	1.79	<i>1.60</i>	<i>1.44</i>	<i>1.35</i>	<i>1.26</i>	<i>1.17</i>	<i>1.08</i>	<i>0.99</i>	<i>0.90</i>	1.95	<i>1.41</i>	<i>1.03</i>
OPEC Total	33.95	33.56	33.36	32.93	<i>32.79</i>	<i>32.74</i>	<i>32.68</i>	<i>32.63</i>	<i>33.05</i>	<i>33.04</i>	<i>33.01</i>	<i>32.97</i>	33.45	<i>32.71</i>	<i>33.02</i>
Surplus Crude Oil Production Capacity															
Africa	0.00	0.00	0.00	0.00	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	0.00	<i>0.00</i>	<i>0.00</i>
Middle East	1.86	1.78	1.34	0.97	<i>2.08</i>	<i>1.98</i>	<i>1.81</i>	<i>2.04</i>	<i>2.63</i>	<i>2.53</i>	<i>2.36</i>	<i>2.60</i>	1.48	<i>1.97</i>	<i>2.53</i>
South America	0.00	0.00	0.00	0.00	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	0.00	<i>0.00</i>	<i>0.00</i>
OPEC Total	1.86	1.78	1.34	0.97	<i>2.08</i>	<i>1.98</i>	<i>1.81</i>	<i>2.04</i>	<i>2.63</i>	<i>2.53</i>	<i>2.36</i>	<i>2.60</i>	1.48	<i>1.97</i>	<i>2.53</i>
Unplanned OPEC Production Outages	1.21	1.43	1.59	1.99	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	1.56	<i>n/a</i>	<i>n/a</i>

- = no data available

OPEC = Organization of the Petroleum Exporting Countries: Algeria, Angola, Congo (Brazzaville), Equatorial Guinea, Gabon, Libya, and Nigeria (Africa); Ecuador and Venezuela (South America); Iran, Iraq, Kuwait, Saudi Arabia, and the United Arab Emirates (Middle East).

(a) Includes lease condensate, natural gas plant liquids, other liquids, and refinery processing gain. Includes other unaccounted-for liquids.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.**Historical data:** Latest data available from Energy Information Administration international energy statistics.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 3d. World Petroleum and Other Liquids Consumption (million barrels per day)

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2019

	2018				2019				2020				2018	2019	2020
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
North America	24.56	24.71	25.17	25.17	24.97	25.11	25.53	25.31	25.17	25.35	25.83	25.49	24.91	25.23	25.46
Canada	2.32	2.34	2.56	2.52	2.41	2.36	2.47	2.44	2.42	2.36	2.46	2.44	2.44	2.42	2.42
Mexico	1.99	2.02	1.97	1.96	1.96	1.98	1.98	2.01	1.97	2.00	2.00	2.01	1.99	1.98	1.99
United States	20.24	20.33	20.63	20.69	20.59	20.76	21.07	20.85	20.78	20.98	21.36	21.03	20.47	20.82	21.04
Central and South America	6.72	6.76	6.94	6.94	6.69	6.83	6.95	6.94	6.73	6.87	7.00	7.02	6.84	6.85	6.91
Brazil	2.98	2.95	3.11	3.13	3.00	3.07	3.15	3.14	3.05	3.12	3.21	3.21	3.04	3.09	3.15
Europe	14.80	14.93	15.41	15.04	14.79	15.01	15.54	15.24	14.89	15.11	15.64	15.34	15.05	15.15	15.25
Eurasia	4.78	4.83	5.11	4.98	4.80	4.87	5.24	5.09	4.90	4.97	5.36	5.20	4.93	5.00	5.11
Russia	3.63	3.70	3.91	3.78	3.64	3.73	4.04	3.88	3.73	3.83	4.14	3.99	3.75	3.82	3.92
Middle East	8.24	8.79	9.07	8.68	8.50	8.84	9.16	8.65	8.52	8.98	9.31	8.80	8.70	8.79	8.91
Asia and Oceania	35.59	35.10	34.46	35.62	36.46	35.90	35.30	36.32	37.24	36.69	36.07	37.14	35.19	35.99	36.79
China	13.80	14.00	13.73	13.95	14.28	14.47	14.20	14.41	14.76	14.95	14.67	14.90	13.87	14.34	14.82
Japan	4.27	3.43	3.53	3.91	4.15	3.40	3.47	3.79	4.05	3.32	3.39	3.73	3.79	3.70	3.62
India	4.73	4.89	4.57	4.89	5.07	5.13	4.79	5.10	5.30	5.37	5.01	5.33	4.77	5.02	5.25
Africa	4.34	4.35	4.26	4.45	4.42	4.43	4.36	4.53	4.50	4.50	4.43	4.61	4.35	4.43	4.51
Total OECD Liquid Fuels Consumption	47.58	46.94	47.89	48.10	47.91	47.34	48.37	48.32	48.10	47.58	48.70	48.54	47.63	47.99	48.24
Total non-OECD Liquid Fuels Consumption	51.46	52.53	52.53	52.79	52.74	53.65	53.70	53.75	53.86	54.90	54.95	55.05	52.33	53.46	54.69
Total World Liquid Fuels Consumption	99.04	99.47	100.42	100.89	100.64	100.99	102.06	102.07	101.96	102.49	103.65	103.60	99.96	101.45	102.93
Oil-weighted Real Gross Domestic Product (a)															
World Index, 2015 Q1 = 100	109.2	109.9	110.5	111.3	112.2	112.9	113.7	114.5	114.7	116.5	117.3	118.2	110.2	113.4	116.7
Percent change from prior year	3.3	3.2	3.0	2.9	2.8	2.8	2.9	2.9	2.2	3.2	3.1	3.2	3.1	2.8	2.9
OECD Index, 2015 Q1 = 100	106.5	107.1	107.5	108.1	108.8	109.2	109.7	110.2	109.9	111.4	111.9	112.4	107.3	109.5	111.4
Percent change from prior year	2.5	2.5	2.3	2.2	2.2	2.0	2.0	1.9	1.0	2.1	2.0	2.0	2.4	2.0	1.8
Non-OECD Index, 2015 Q1 = 100	111.7	112.5	113.4	114.4	115.5	116.5	117.6	118.8	119.4	121.4	122.6	123.8	113.0	117.1	121.8
Percent change from prior year	4.0	3.9	3.7	3.6	3.4	3.5	3.7	3.8	3.4	4.2	4.2	4.2	3.8	3.6	4.0
Real U.S. Dollar Exchange Rate (a)															
Index, 2015 Q1 = 100	100.72	102.73	105.52	106.29	105.09	104.55	103.94	103.35	102.62	102.13	101.46	100.89	103.81	104.23	101.77
Percent change from prior year	-4.0	-0.8	3.4	3.8	4.3	1.8	-1.5	-2.8	-2.3	-2.3	-2.4	-2.4	0.6	0.4	-2.4

- = no data available

OECD = Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Latvia, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, the United States.

(a) Weighted geometric mean of real indices for various countries with weights equal to each country's share of world oil consumption in the base period. Exchange rate is measured in foreign currency per U.S. dollar. GDP and exchange rate data are from Oxford Economics, and oil consumption data are from EIA.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Historical data: Latest data available from Energy Information Administration international energy statistics.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 4a. U.S. Petroleum and Other Liquids Supply, Consumption, and Inventories

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Supply (million barrels per day)															
Crude Oil Supply															
Domestic Production (a)	10.23	10.54	11.24	11.79	12.15	12.41	12.42	12.65	12.97	13.18	13.20	13.45	10.96	12.41	13.20
Alaska	0.51	0.48	0.43	0.49	0.50	0.49	0.46	0.49	0.52	0.50	0.48	0.49	0.48	0.49	0.49
Federal Gulf of Mexico (b)	1.67	1.58	1.85	1.85	1.97	2.04	1.97	2.11	2.26	2.34	2.28	2.45	1.74	2.02	2.33
Lower 48 States (excl GOM)	8.05	8.47	8.96	9.45	9.67	9.87	9.99	10.05	10.19	10.34	10.44	10.52	8.74	9.90	10.37
Crude Oil Net Imports (c)	6.18	6.19	5.84	5.22	4.92	4.71	4.71	4.35	4.41	4.72	4.56	4.24	5.85	4.67	4.48
SPR Net Withdrawals	-0.03	0.06	0.00	0.12	0.00	0.05	0.00	0.04	0.04	0.04	0.01	0.03	0.04	0.02	0.03
Commercial Inventory Net Withdrawals	-0.02	0.09	-0.01	-0.26	-0.46	0.02	0.11	-0.08	-0.44	0.09	0.16	-0.07	-0.05	-0.10	-0.07
Crude Oil Adjustment (d)	0.05	0.26	0.25	0.14	0.13	0.19	0.21	0.15	0.19	0.19	0.21	0.15	0.18	0.17	0.19
Total Crude Oil Input to Refineries	16.41	17.14	17.32	17.02	16.75	17.38	17.45	17.11	17.17	18.20	18.15	17.81	16.98	17.17	17.83
Other Supply															
Refinery Processing Gain	1.11	1.12	1.17	1.14	1.10	1.12	1.14	1.18	1.20	1.25	1.26	1.27	1.14	1.14	1.24
Natural Gas Plant Liquids Production	4.01	4.30	4.54	4.60	4.76	4.90	5.00	5.11	5.15	5.25	5.33	5.42	4.36	4.94	5.29
Renewables and Oxygenate Production (e)	1.21	1.22	1.25	1.22	1.18	1.22	1.23	1.23	1.20	1.24	1.25	1.24	1.22	1.21	1.23
Fuel Ethanol Production	1.05	1.04	1.06	1.04	1.03	1.05	1.04	1.04	1.04	1.06	1.05	1.04	1.05	1.04	1.05
Petroleum Products Adjustment (f)	0.21	0.21	0.21	0.21	0.22	0.23	0.22	0.23	0.22	0.24	0.24	0.24	0.21	0.22	0.24
Product Net Imports (c)	-3.13	-3.44	-3.17	-3.89	-3.78	-3.52	-3.63	-4.34	-4.46	-4.70	-4.57	-5.31	-3.41	-3.82	-4.76
Hydrocarbon Gas Liquids	-1.22	-1.53	-1.49	-1.47	-1.66	-1.74	-1.75	-1.93	-1.93	-1.97	-1.96	-2.11	-1.43	-1.77	-1.99
Unfinished Oils	0.39	0.32	0.35	0.32	0.32	0.42	0.44	0.36	0.50	0.61	0.61	0.53	0.34	0.38	0.56
Other HC/Oxygenates	-0.18	-0.15	-0.13	-0.13	-0.14	-0.12	-0.12	-0.10	-0.13	-0.12	-0.12	-0.12	-0.15	-0.12	-0.12
Motor Gasoline Blend Comp.	0.50	0.78	0.66	0.33	0.28	0.65	0.49	0.45	0.44	0.67	0.50	0.45	0.57	0.47	0.51
Finished Motor Gasoline	-0.94	-0.71	-0.72	-0.97	-0.77	-0.64	-0.61	-1.03	-1.05	-0.93	-0.78	-1.28	-0.84	-0.76	-1.01
Jet Fuel	-0.10	-0.10	-0.06	-0.18	-0.02	-0.01	-0.03	-0.02	-0.03	-0.08	-0.09	-0.07	-0.11	-0.02	-0.07
Distillate Fuel Oil	-0.87	-1.30	-1.14	-1.15	-1.13	-1.34	-1.34	-1.26	-1.45	-1.94	-1.87	-1.75	-1.12	-1.27	-1.75
Residual Fuel Oil	-0.10	-0.14	-0.10	-0.13	-0.04	-0.09	-0.06	-0.08	-0.07	-0.12	-0.08	-0.11	-0.12	-0.07	-0.09
Other Oils (g)	-0.62	-0.61	-0.53	-0.50	-0.62	-0.65	-0.63	-0.73	-0.74	-0.82	-0.78	-0.84	-0.56	-0.66	-0.80
Product Inventory Net Withdrawals	0.41	-0.21	-0.69	0.36	0.37	-0.56	-0.35	0.34	0.31	-0.51	-0.30	0.36	-0.03	-0.05	-0.04
Total Supply	20.23	20.33	20.63	20.58	20.59	20.76	21.07	20.85	20.78	20.98	21.36	21.03	20.45	20.82	21.04
Consumption (million barrels per day)															
Hydrocarbon Gas Liquids	3.22	2.67	2.85	3.23	3.37	2.92	3.03	3.32	3.52	3.11	3.19	3.47	2.99	3.16	3.32
Unfinished Oils	0.13	-0.04	-0.10	0.06	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Motor Gasoline	9.01	9.51	9.51	9.20	9.06	9.58	9.55	9.21	9.04	9.59	9.64	9.18	9.31	9.35	9.36
Fuel Ethanol blended into Motor Gasoline	0.91	0.94	0.96	0.94	0.92	0.97	0.97	0.94	0.91	0.98	0.98	0.94	0.94	0.95	0.95
Jet Fuel	1.64	1.73	1.78	1.66	1.72	1.79	1.83	1.80	1.74	1.81	1.86	1.83	1.70	1.79	1.81
Distillate Fuel Oil	4.18	4.13	4.05	4.21	4.21	4.11	4.11	4.24	4.27	4.13	4.17	4.27	4.14	4.17	4.21
Residual Fuel Oil	0.28	0.32	0.34	0.30	0.34	0.33	0.35	0.31	0.32	0.30	0.32	0.28	0.31	0.33	0.31
Other Oils (g)	1.78	2.01	2.22	2.04	1.90	2.03	2.19	1.97	1.89	2.04	2.18	1.99	2.01	2.03	2.03
Total Consumption	20.24	20.33	20.63	20.69	20.59	20.76	21.07	20.85	20.78	20.98	21.36	21.03	20.47	20.82	21.04
Total Petroleum and Other Liquids Net Imports	3.05	2.75	2.67	1.33	1.14	1.18	1.08	0.01	-0.05	0.01	0.00	-1.07	2.45	0.85	-0.28
End-of-period Inventories (million barrels)															
Commercial Inventory															
Crude Oil (excluding SPR)	423.4	414.8	416.1	439.7	480.7	479.1	469.2	476.7	516.5	508.8	494.4	501.0	439.7	476.7	501.0
Hydrocarbon Gas Liquids	139.3	180.8	224.8	185.0	150.3	204.4	245.0	201.4	164.3	213.8	251.8	207.4	185.0	201.4	207.4
Unfinished Oils	98.3	92.6	92.0	89.5	91.6	90.0	88.1	81.6	92.2	91.4	88.4	82.0	89.5	81.6	82.0
Other HC/Oxygenates	30.5	28.8	30.5	30.0	30.7	29.7	29.0	29.6	31.4	30.4	29.7	30.3	30.0	29.6	30.3
Total Motor Gasoline	239.6	240.3	239.7	248.1	245.2	239.8	234.1	247.4	246.6	242.9	238.3	250.8	248.1	247.4	250.8
Finished Motor Gasoline	23.1	24.7	24.8	25.7	25.4	24.1	24.9	25.5	25.2	24.1	25.1	25.3	25.7	25.5	25.3
Motor Gasoline Blend Comp.	216.5	215.6	214.9	222.4	219.8	215.7	209.3	221.9	221.5	218.8	213.2	225.5	222.4	221.9	225.5
Jet Fuel	40.4	40.8	46.9	40.5	40.9	42.4	44.0	42.0	41.9	43.4	44.7	42.8	40.5	42.0	42.8
Distillate Fuel Oil	130.4	120.4	137.1	140.0	131.1	133.5	138.4	143.1	133.5	135.6	140.5	145.4	140.0	143.1	145.4
Residual Fuel Oil	35.0	30.0	28.6	28.3	32.9	35.8	35.5	36.0	38.1	38.2	36.4	35.9	28.3	36.0	35.9
Other Oils (g)	59.3	58.8	56.1	58.3	63.2	61.4	55.2	57.0	62.3	60.7	54.7	56.7	58.3	57.0	56.7
Total Commercial Inventory	1,196	1,207	1,272	1,259	1,267	1,316	1,339	1,315	1,327	1,365	1,379	1,352	1,259	1,315	1,352
Crude Oil in SPR	665	660	660	649	649	644	644	641	637	634	633	630	649	641	630

- = no data available

(a) Includes lease condensate.

(b) Crude oil production from U.S. Federal leases in the Gulf of Mexico (GOM).

(c) Net imports equals gross imports minus gross exports.

(d) Crude oil adjustment balances supply and consumption and was previously referred to as "Unaccounted for Crude Oil."

(e) Renewables and oxygenate production includes pentanes plus, oxygenates (excluding fuel ethanol), and renewable fuels.

(f) Petroleum products adjustment includes hydrogen/oxygenates/renewables/other hydrocarbons, motor gasoline blend components, and finished motor gasoline.

(g) "Other Oils" includes aviation gasoline blend components, finished aviation gasoline, kerosene, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt and road oil, still gas, and miscellaneous products.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

SPR: Strategic Petroleum Reserve

HC: Hydrocarbons

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: *Petroleum Supply Monthly*, DOE/EIA-0109;*Petroleum Supply Annual*, DOE/EIA-0340/2; and *Weekly Petroleum Status Report*, DOE/EIA-0208.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 4b. U.S. Hydrocarbon Gas Liquids (HGL) and Petroleum Refinery Balances (million barrels per day, except inventories and utilization factor)

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
HGL Production															
Natural Gas Processing Plants															
Ethane	1.59	1.70	1.76	1.80	1.93	1.95	1.98	2.06	2.14	2.17	2.18	2.26	1.71	1.98	2.19
Propane	1.29	1.37	1.44	1.48	1.49	1.56	1.59	1.61	1.61	1.64	1.66	1.68	1.39	1.56	1.65
Butanes	0.69	0.74	0.78	0.79	0.81	0.83	0.85	0.86	0.86	0.87	0.89	0.89	0.75	0.84	0.88
Natural Gasoline (Pentanes Plus)	0.44	0.50	0.55	0.52	0.52	0.56	0.58	0.57	0.54	0.58	0.60	0.59	0.50	0.56	0.58
Refinery and Blender Net Production															
Ethane/Ethylene	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Propane	0.30	0.31	0.31	0.29	0.28	0.30	0.29	0.30	0.29	0.31	0.30	0.31	0.30	0.29	0.30
Propylene (refinery-grade)	0.28	0.29	0.29	0.30	0.28	0.29	0.28	0.29	0.28	0.29	0.29	0.29	0.29	0.28	0.29
Butanes/Butylenes	-0.11	0.24	0.19	-0.20	-0.08	0.26	0.19	-0.20	-0.08	0.26	0.19	-0.20	0.03	0.04	0.04
Renewable Fuels and Oxygenate Plant Net Production															
Natural Gasoline (Pentanes Plus)	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02
HGL Net Imports															
Ethane	-0.22	-0.29	-0.26	-0.30	-0.32	-0.32	-0.32	-0.35	-0.37	-0.37	-0.37	-0.40	-0.27	-0.33	-0.38
Propane/Propylene	-0.72	-0.81	-0.87	-0.81	-0.83	-0.89	-0.89	-1.05	-0.96	-0.99	-0.98	-1.12	-0.80	-0.91	-1.02
Butanes/Butylenes	-0.10	-0.20	-0.19	-0.18	-0.26	-0.27	-0.26	-0.26	-0.30	-0.30	-0.28	-0.28	-0.17	-0.26	-0.29
Natural Gasoline (Pentanes Plus)	-0.18	-0.23	-0.17	-0.18	-0.25	-0.26	-0.29	-0.29	-0.29	-0.30	-0.33	-0.31	-0.19	-0.27	-0.31
HGL Refinery and Blender Net Inputs															
Butanes/Butylenes	0.45	0.30	0.32	0.54	0.41	0.30	0.33	0.51	0.42	0.31	0.34	0.52	0.40	0.39	0.40
Natural Gasoline (Pentanes Plus)	0.15	0.16	0.18	0.18	0.17	0.18	0.18	0.18	0.16	0.17	0.18	0.17	0.17	0.18	0.17
HGL Consumption															
Ethane/Ethylene	1.44	1.45	1.51	1.49	1.61	1.61	1.69	1.75	1.77	1.78	1.84	1.89	1.47	1.66	1.82
Propane	1.16	0.60	0.65	1.07	1.16	0.66	0.72	0.97	1.18	0.68	0.74	0.98	0.87	0.88	0.89
Propylene (refinery-grade)	0.32	0.31	0.31	0.29	0.31	0.31	0.30	0.29	0.31	0.33	0.31	0.30	0.30	0.30	0.31
Butanes/Butylenes	0.20	0.21	0.21	0.24	0.20	0.27	0.25	0.22	0.19	0.26	0.25	0.22	0.22	0.24	0.23
Natural Gasoline (Pentanes Plus)	0.10	0.09	0.16	0.14	0.09	0.07	0.07	0.08	0.08	0.06	0.07	0.08	0.12	0.08	0.07
HGL Inventories (million barrels)															
Ethane	51.41	47.90	46.07	49.88	48.49	51.47	49.60	49.09	47.34	50.38	48.51	48.00	48.80	49.66	48.56
Propane	33.83	56.51	75.16	63.67	42.19	68.23	90.90	79.06	54.79	77.07	97.16	84.95	63.67	79.06	84.95
Propylene (refinery-grade)	3.82	3.64	3.86	6.57	5.97	5.83	5.79	6.91	6.56	5.94	5.98	6.78	6.57	6.91	6.78
Butanes/Butylenes	32.02	55.37	78.52	44.51	32.48	56.15	74.59	43.97	32.17	55.84	74.28	43.66	44.51	43.97	43.66
Natural Gasoline (Pentanes Plus)	19.36	18.59	20.34	21.41	20.31	22.67	24.16	23.96	22.50	24.58	25.88	25.59	21.41	23.96	25.59
Refinery and Blender Net Inputs															
Crude Oil	16.41	17.14	17.32	17.02	16.75	17.38	17.45	17.11	17.17	18.20	18.15	17.81	16.98	17.17	17.83
Hydrocarbon Gas Liquids	0.61	0.47	0.50	0.71	0.58	0.48	0.52	0.69	0.58	0.48	0.52	0.70	0.57	0.57	0.57
Other Hydrocarbons/Oxygenates	1.16	1.23	1.22	1.22	1.20	1.27	1.26	1.27	1.22	1.30	1.30	1.27	1.21	1.25	1.27
Unfinished Oils	0.12	0.42	0.45	0.29	0.31	0.43	0.46	0.43	0.39	0.62	0.65	0.60	0.32	0.41	0.56
Motor Gasoline Blend Components	0.34	0.70	0.58	0.28	0.42	0.83	0.66	0.49	0.57	0.84	0.66	0.49	0.47	0.60	0.64
Aviation Gasoline Blend Components	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Refinery and Blender Net Inputs	18.63	19.96	20.08	19.52	19.25	20.40	20.35	19.99	19.93	21.44	21.27	20.85	19.55	20.00	20.88
Refinery Processing Gain															
.....	1.11	1.12	1.17	1.14	1.10	1.12	1.14	1.18	1.20	1.25	1.26	1.27	1.14	1.14	1.24
Refinery and Blender Net Production															
Hydrocarbon Gas Liquids	0.48	0.84	0.80	0.40	0.48	0.85	0.76	0.39	0.50	0.87	0.78	0.40	0.63	0.62	0.64
Finished Motor Gasoline	9.79	10.14	10.11	10.18	9.92	10.32	10.26	10.39	10.18	10.62	10.50	10.60	10.06	10.22	10.48
Jet Fuel	1.72	1.83	1.90	1.77	1.75	1.81	1.88	1.80	1.76	1.90	1.96	1.88	1.81	1.81	1.88
Distillate Fuel	4.81	5.25	5.29	5.31	5.20	5.41	5.43	5.47	5.58	6.03	6.02	6.01	5.17	5.38	5.91
Residual Fuel	0.44	0.40	0.42	0.43	0.43	0.45	0.40	0.40	0.41	0.42	0.38	0.39	0.43	0.42	0.40
Other Oils (a)	2.49	2.61	2.72	2.56	2.57	2.67	2.76	2.72	2.69	2.84	2.90	2.85	2.60	2.68	2.82
Total Refinery and Blender Net Production	19.74	21.08	21.25	20.66	20.35	21.52	21.49	21.17	21.13	22.69	22.54	22.13	20.69	21.14	22.12
Refinery Distillation Inputs															
.....	16.76	17.50	17.69	17.35	16.95	17.49	17.63	17.28	17.31	18.24	18.27	17.91	17.33	17.34	17.93
Refinery Operable Distillation Capacity															
.....	18.57	18.60	18.60	18.60	18.60	18.60	18.61	18.62	18.62	18.62	18.62	18.65	18.59	18.61	18.63
Refinery Distillation Utilization Factor															
.....	0.90	0.94	0.95	0.93	0.91	0.94	0.95	0.93	0.93	0.98	0.98	0.96	0.93	0.93	0.96

- = no data available

(a) "Other Oils" includes aviation gasoline blend components, finished aviation gasoline, kerosene, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt and road oil, still gas, and miscellaneous products.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.**Historical data:** Latest data available from Energy Information Administration databases supporting the following reports: *Petroleum Supply Monthly*, DOE/EIA-0109;*Petroleum Supply Annual*, DOE/EIA-0340/2; *Weekly Petroleum Status Report*, DOE/EIA-0208.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 4c. U.S. Regional Motor Gasoline Prices and Inventories

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Prices (cents per gallon)															
Refiner Wholesale Price	186	213	213	179	<i>161</i>	<i>181</i>	<i>180</i>	<i>169</i>	<i>177</i>	<i>190</i>	<i>184</i>	<i>169</i>	198	<i>173</i>	<i>180</i>
Gasoline Regular Grade Retail Prices Including Taxes															
PADD 1	255	279	278	257	<i>228</i>	<i>248</i>	<i>250</i>	<i>245</i>	<i>247</i>	<i>258</i>	<i>256</i>	<i>246</i>	268	<i>243</i>	<i>252</i>
PADD 2	246	274	276	245	<i>217</i>	<i>246</i>	<i>248</i>	<i>237</i>	<i>242</i>	<i>257</i>	<i>254</i>	<i>238</i>	261	<i>238</i>	<i>248</i>
PADD 3	230	261	258	231	<i>206</i>	<i>231</i>	<i>229</i>	<i>219</i>	<i>226</i>	<i>240</i>	<i>234</i>	<i>219</i>	245	<i>221</i>	<i>230</i>
PADD 4	247	288	297	281	<i>228</i>	<i>248</i>	<i>257</i>	<i>243</i>	<i>234</i>	<i>258</i>	<i>264</i>	<i>244</i>	279	<i>244</i>	<i>250</i>
PADD 5	312	342	335	333	<i>289</i>	<i>308</i>	<i>306</i>	<i>286</i>	<i>289</i>	<i>319</i>	<i>314</i>	<i>287</i>	330	<i>297</i>	<i>303</i>
U.S. Average	258	285	284	263	<i>232</i>	<i>255</i>	<i>256</i>	<i>246</i>	<i>249</i>	<i>265</i>	<i>262</i>	<i>246</i>	273	<i>247</i>	<i>256</i>
Gasoline All Grades Including Taxes	270	294	292	271	<i>242</i>	<i>266</i>	<i>267</i>	<i>258</i>	<i>261</i>	<i>278</i>	<i>274</i>	<i>259</i>	282	<i>258</i>	<i>268</i>
End-of-period Inventories (million barrels)															
Total Gasoline Inventories															
PADD 1	58.4	66.5	70.2	63.5	<i>67.2</i>	<i>67.7</i>	<i>64.3</i>	<i>68.1</i>	<i>67.8</i>	<i>68.7</i>	<i>65.7</i>	<i>69.0</i>	63.5	<i>68.1</i>	<i>69.0</i>
PADD 2	57.3	53.5	53.1	57.0	<i>57.0</i>	<i>53.6</i>	<i>51.7</i>	<i>53.7</i>	<i>56.7</i>	<i>54.1</i>	<i>52.5</i>	<i>54.3</i>	57.0	<i>53.7</i>	<i>54.3</i>
PADD 3	84.2	82.3	80.5	89.4	<i>83.4</i>	<i>82.4</i>	<i>82.2</i>	<i>86.1</i>	<i>84.2</i>	<i>83.7</i>	<i>83.8</i>	<i>87.7</i>	89.4	<i>86.1</i>	<i>87.7</i>
PADD 4	7.7	7.3	7.0	7.5	<i>7.6</i>	<i>7.6</i>	<i>7.4</i>	<i>7.8</i>	<i>7.6</i>	<i>7.7</i>	<i>7.6</i>	<i>8.0</i>	7.5	<i>7.8</i>	<i>8.0</i>
PADD 5	32.0	30.7	28.8	30.7	<i>30.0</i>	<i>28.6</i>	<i>28.6</i>	<i>31.7</i>	<i>30.3</i>	<i>28.7</i>	<i>28.8</i>	<i>31.8</i>	30.7	<i>31.7</i>	<i>31.8</i>
U.S. Total	239.6	240.3	239.7	248.1	<i>245.2</i>	<i>239.8</i>	<i>234.1</i>	<i>247.4</i>	<i>246.6</i>	<i>242.9</i>	<i>238.3</i>	<i>250.8</i>	248.1	<i>247.4</i>	<i>250.8</i>
Finished Gasoline Inventories															
U.S. Total	23.1	24.7	24.8	25.7	<i>25.4</i>	<i>24.1</i>	<i>24.9</i>	<i>25.5</i>	<i>25.2</i>	<i>24.1</i>	<i>25.1</i>	<i>25.3</i>	25.7	<i>25.5</i>	<i>25.3</i>
Gasoline Blending Components Inventories															
U.S. Total	216.5	215.6	214.9	222.4	<i>219.8</i>	<i>215.7</i>	<i>209.3</i>	<i>221.9</i>	<i>221.5</i>	<i>218.8</i>	<i>213.2</i>	<i>225.5</i>	222.4	<i>221.9</i>	<i>225.5</i>

- = no data available

Prices are not adjusted for inflation.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Regions refer to Petroleum Administration for Defense Districts (PADD).

 See "Petroleum for Administration Defense District" in EIA's Energy Glossary (<http://www.eia.doe.gov/glossary/index.html>) for a list of States in each region.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports *Petroleum Marketing Monthly*, DOE/EIA-0380;

Petroleum Supply Monthly, DOE/EIA-0109; *Petroleum Supply Annual*, DOE/EIA-0340/2; and *Weekly Petroleum Status Report*, DOE/EIA-0208.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 5a. U.S. Natural Gas Supply, Consumption, and Inventories

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Supply (billion cubic feet per day)															
Total Marketed Production	84.93	87.39	91.50	94.33	<i>95.25</i>	<i>97.11</i>	<i>97.85</i>	<i>98.31</i>	<i>98.86</i>	<i>99.43</i>	<i>99.53</i>	<i>99.75</i>	89.57	<i>97.14</i>	<i>99.39</i>
Alaska	1.00	0.92	0.86	0.95	<i>1.00</i>	<i>0.86</i>	<i>0.79</i>	<i>0.94</i>	<i>1.01</i>	<i>0.87</i>	<i>0.81</i>	<i>0.95</i>	0.93	<i>0.90</i>	<i>0.91</i>
Federal GOM (a)	2.57	2.48	2.86	2.81	<i>2.92</i>	<i>2.94</i>	<i>2.89</i>	<i>2.94</i>	<i>3.02</i>	<i>3.06</i>	<i>3.05</i>	<i>3.13</i>	2.68	<i>2.92</i>	<i>3.07</i>
Lower 48 States (excl GOM)	81.37	83.98	87.79	90.57	<i>91.33</i>	<i>93.30</i>	<i>94.17</i>	<i>94.43</i>	<i>94.83</i>	<i>95.49</i>	<i>95.67</i>	<i>95.67</i>	85.96	<i>93.32</i>	<i>95.42</i>
Total Dry Gas Production	79.13	81.17	84.96	87.67	<i>88.48</i>	<i>90.16</i>	<i>90.80</i>	<i>91.18</i>	<i>91.63</i>	<i>92.11</i>	<i>92.16</i>	<i>92.31</i>	83.26	<i>90.16</i>	<i>92.05</i>
LNG Gross Imports	0.33	0.10	0.15	0.18	<i>0.32</i>	<i>0.17</i>	<i>0.17</i>	<i>0.21</i>	<i>0.32</i>	<i>0.18</i>	<i>0.18</i>	<i>0.20</i>	0.19	<i>0.22</i>	<i>0.22</i>
LNG Gross Exports	2.64	2.79	2.95	3.47	<i>4.11</i>	<i>4.27</i>	<i>5.55</i>	<i>6.52</i>	<i>7.01</i>	<i>6.16</i>	<i>6.47</i>	<i>7.38</i>	2.97	<i>5.12</i>	<i>6.76</i>
Pipeline Gross Imports	8.76	7.63	7.50	7.19	<i>8.35</i>	<i>6.38</i>	<i>6.10</i>	<i>7.11</i>	<i>8.26</i>	<i>6.14</i>	<i>6.13</i>	<i>6.63</i>	7.76	<i>6.98</i>	<i>6.79</i>
Pipeline Gross Exports	7.02	6.15	7.04	7.65	<i>8.60</i>	<i>7.69</i>	<i>7.37</i>	<i>8.02</i>	<i>9.49</i>	<i>8.15</i>	<i>7.74</i>	<i>8.26</i>	6.97	<i>7.92</i>	<i>8.41</i>
Supplemental Gaseous Fuels	0.21	0.17	0.19	0.19	<i>0.20</i>	<i>0.21</i>	<i>0.21</i>	<i>0.21</i>	<i>0.21</i>	<i>0.21</i>	<i>0.21</i>	<i>0.21</i>	0.19	<i>0.21</i>	<i>0.21</i>
Net Inventory Withdrawals	18.31	-8.86	-8.22	2.68	<i>14.29</i>	<i>-12.48</i>	<i>-9.54</i>	<i>3.04</i>	<i>16.11</i>	<i>-11.01</i>	<i>-8.11</i>	<i>3.24</i>	0.91	<i>-1.23</i>	<i>0.04</i>
Total Supply	97.09	71.27	74.59	86.80	<i>98.93</i>	<i>72.48</i>	<i>74.81</i>	<i>87.20</i>	<i>100.03</i>	<i>73.31</i>	<i>76.35</i>	<i>86.93</i>	82.39	<i>83.30</i>	<i>84.14</i>
Balancing Item (b)	0.45	-0.61	-0.55	-2.09	<i>0.13</i>	<i>-0.85</i>	<i>-0.58</i>	<i>-1.74</i>	<i>-1.01</i>	<i>-0.86</i>	<i>0.29</i>	<i>-0.74</i>	-0.70	<i>-0.77</i>	<i>-0.58</i>
Total Primary Supply	97.54	70.66	74.04	84.71	<i>99.06</i>	<i>71.62</i>	<i>74.22</i>	<i>85.46</i>	<i>99.02</i>	<i>72.46</i>	<i>76.64</i>	<i>86.19</i>	81.68	<i>82.53</i>	<i>83.56</i>
Consumption (billion cubic feet per day)															
Residential	25.75	7.97	3.44	16.87	<i>25.98</i>	<i>7.74</i>	<i>3.56</i>	<i>16.56</i>	<i>25.51</i>	<i>7.59</i>	<i>3.45</i>	<i>16.23</i>	13.46	<i>13.41</i>	<i>13.18</i>
Commercial	15.34	6.61	4.58	10.88	<i>15.20</i>	<i>6.77</i>	<i>4.64</i>	<i>10.62</i>	<i>14.92</i>	<i>6.37</i>	<i>4.60</i>	<i>10.13</i>	9.33	<i>9.28</i>	<i>9.00</i>
Industrial	24.27	21.78	21.23	23.52	<i>24.62</i>	<i>22.05</i>	<i>21.43</i>	<i>24.33</i>	<i>25.00</i>	<i>22.36</i>	<i>21.60</i>	<i>24.56</i>	22.69	<i>23.10</i>	<i>23.38</i>
Electric Power (c)	24.91	27.61	37.80	25.99	<i>25.37</i>	<i>27.73</i>	<i>37.02</i>	<i>26.00</i>	<i>25.22</i>	<i>28.47</i>	<i>39.19</i>	<i>27.13</i>	29.10	<i>29.05</i>	<i>30.02</i>
Lease and Plant Fuel	4.55	4.68	4.90	5.05	<i>5.10</i>	<i>5.20</i>	<i>5.24</i>	<i>5.27</i>	<i>5.30</i>	<i>5.33</i>	<i>5.33</i>	<i>5.34</i>	4.80	<i>5.21</i>	<i>5.33</i>
Pipeline and Distribution Use	2.60	1.88	1.97	2.26	<i>2.66</i>	<i>2.01</i>	<i>2.20</i>	<i>2.57</i>	<i>2.94</i>	<i>2.22</i>	<i>2.35</i>	<i>2.67</i>	2.18	<i>2.36</i>	<i>2.54</i>
Vehicle Use	0.12	0.12	0.12	0.12	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	<i>0.12</i>	0.12	<i>0.12</i>	<i>0.12</i>
Total Consumption	97.54	70.66	74.04	84.71	<i>99.06</i>	<i>71.62</i>	<i>74.22</i>	<i>85.46</i>	<i>99.02</i>	<i>72.46</i>	<i>76.64</i>	<i>86.19</i>	81.68	<i>82.53</i>	<i>83.56</i>
End-of-period Inventories (billion cubic feet)															
Working Gas Inventory	1,391	2,196	2,951	2,703	<i>1,417</i>	<i>2,552</i>	<i>3,430</i>	<i>3,151</i>	<i>1,685</i>	<i>2,687</i>	<i>3,433</i>	<i>3,135</i>	2,703	<i>3,151</i>	<i>3,135</i>
East Region (d)	229	465	778	657	<i>244</i>	<i>594</i>	<i>913</i>	<i>807</i>	<i>311</i>	<i>615</i>	<i>875</i>	<i>789</i>	657	<i>807</i>	<i>789</i>
Midwest Region (d)	261	459	846	783	<i>258</i>	<i>551</i>	<i>927</i>	<i>797</i>	<i>273</i>	<i>543</i>	<i>878</i>	<i>757</i>	783	<i>797</i>	<i>757</i>
South Central Region (d)	614	846	846	872	<i>629</i>	<i>959</i>	<i>1,060</i>	<i>1,082</i>	<i>761</i>	<i>1,041</i>	<i>1,126</i>	<i>1,113</i>	872	<i>1,082</i>	<i>1,113</i>
Mountain Region (d)	87	140	179	141	<i>82</i>	<i>129</i>	<i>177</i>	<i>150</i>	<i>108</i>	<i>153</i>	<i>194</i>	<i>158</i>	141	<i>150</i>	<i>158</i>
Pacific Region (d)	169	253	263	213	<i>169</i>	<i>285</i>	<i>318</i>	<i>280</i>	<i>197</i>	<i>300</i>	<i>325</i>	<i>284</i>	213	<i>280</i>	<i>284</i>
Alaska	31	33	38	37	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	37	<i>35</i>	<i>35</i>

- = no data available

(a) Marketed production from U.S. Federal leases in the Gulf of Mexico.

(b) The balancing item represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas demand.

(c) Natural gas used for electricity generation and (a limited amount of) useful thermal output by electric utilities and independent power producers.

 (d) For a list of States in each inventory region refer to *Weekly Natural Gas Storage Report, Notes and Definitions* (<http://ir.eia.gov/ngs/notes.html>) .

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

LNG: liquefied natural gas.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: *Natural Gas Monthly* , DOE/EIA-0130; and *Electric Power Monthly* , DOE/EIA-0226.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 5b. U.S. Regional Natural Gas Prices (dollars per thousand cubic feet)

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Wholesale/Spot															
Henry Hub Spot Price	3.13	2.96	3.04	3.94	3.08	2.79	2.80	3.06	3.15	2.69	2.74	3.01	3.27	2.93	2.90
Residential Retail															
New England	14.38	16.60	19.08	13.96	13.34	13.80	16.99	13.53	13.10	13.88	16.96	13.42	14.87	13.70	13.57
Middle Atlantic	10.17	11.92	18.30	11.41	10.11	11.77	16.57	11.40	10.51	12.25	16.63	11.16	11.30	11.16	11.39
E. N. Central	7.20	9.77	18.40	8.15	7.94	10.62	16.36	8.72	7.92	10.70	16.36	8.67	8.47	9.08	9.07
W. N. Central	8.15	10.48	18.55	8.79	8.65	11.70	17.47	9.50	8.63	11.38	17.09	9.32	9.20	9.85	9.73
S. Atlantic	11.07	15.63	24.90	12.70	11.62	16.07	22.42	13.08	11.68	16.45	22.48	12.88	13.06	13.49	13.46
E. S. Central	9.61	12.70	21.52	10.66	9.87	14.08	20.41	13.01	10.75	15.28	21.39	13.65	10.93	11.87	12.77
W. S. Central	9.27	14.25	22.03	10.34	8.62	13.53	20.10	12.23	9.13	14.54	20.60	12.46	11.02	11.25	11.82
Mountain	8.22	10.41	14.03	7.98	8.63	9.82	13.49	8.91	8.76	10.07	13.66	9.03	8.88	9.30	9.45
Pacific	11.62	12.02	12.88	11.50	12.63	12.46	12.66	11.55	12.66	12.83	13.03	11.87	11.80	12.26	12.49
U.S. Average	9.37	11.94	17.93	9.98	9.70	11.96	16.59	10.69	9.88	12.26	16.75	10.68	10.50	10.79	10.92
Commercial Retail															
New England	11.05	11.73	10.85	10.44	10.60	10.25	9.81	9.42	9.51	9.44	9.37	9.38	10.95	10.13	9.45
Middle Atlantic	8.13	7.67	7.47	7.71	7.80	7.51	6.91	7.56	7.78	7.60	6.96	7.51	7.85	7.57	7.57
E. N. Central	6.19	6.95	9.01	6.68	6.84	7.61	8.84	6.86	6.66	7.58	8.81	6.79	6.66	7.11	7.00
W. N. Central	6.96	7.13	8.92	7.18	7.63	7.82	8.77	7.18	7.41	7.68	8.64	7.10	7.20	7.61	7.45
S. Atlantic	8.29	9.14	9.73	8.80	8.83	9.38	9.84	9.09	9.06	9.77	9.97	8.95	8.75	9.12	9.25
E. S. Central	8.62	9.32	10.51	8.78	8.90	9.57	9.92	8.79	8.39	9.29	9.69	8.61	8.97	9.08	8.73
W. S. Central	7.21	7.90	8.55	7.40	7.66	7.60	8.06	7.48	7.17	7.49	7.94	7.38	7.56	7.66	7.40
Mountain	7.00	7.52	7.92	6.26	6.94	7.30	8.11	7.11	7.34	7.57	8.23	7.14	6.92	7.18	7.41
Pacific	8.90	8.58	9.11	8.62	9.01	8.76	8.90	8.55	8.80	8.79	8.92	8.54	8.78	8.80	8.74
U.S. Average	7.64	8.05	8.77	7.64	7.91	8.13	8.46	7.75	7.74	8.13	8.43	7.69	7.83	7.96	7.87
Industrial Retail															
New England	8.95	8.62	6.49	7.70	8.47	7.51	6.96	8.12	8.72	7.88	7.06	7.98	8.11	7.90	8.05
Middle Atlantic	8.33	8.07	7.73	7.51	8.03	7.25	7.17	7.45	7.91	7.22	7.13	7.38	8.01	7.65	7.57
E. N. Central	5.69	5.02	5.20	5.85	6.68	6.00	5.70	5.62	6.20	5.73	5.55	5.58	5.56	6.13	5.86
W. N. Central	5.05	4.23	4.21	5.18	5.80	4.66	4.36	4.98	5.48	4.46	4.20	4.91	4.72	5.02	4.83
S. Atlantic	5.34	4.67	4.68	5.42	5.57	4.65	4.64	5.13	5.49	4.68	4.58	5.02	5.06	5.03	4.97
E. S. Central	4.93	4.21	4.14	4.94	5.03	4.22	4.20	4.76	5.01	4.33	4.22	4.75	4.59	4.58	4.61
W. S. Central	3.32	3.09	3.12	4.09	3.51	2.99	3.06	3.26	3.37	2.85	2.95	3.19	3.41	3.21	3.10
Mountain	5.43	5.36	4.72	5.01	5.69	5.55	5.83	5.89	6.03	5.59	5.69	5.70	5.15	5.74	5.78
Pacific	6.97	6.03	6.72	6.62	7.29	6.37	6.38	6.47	7.01	6.37	6.36	6.43	6.60	6.66	6.57
U.S. Average	4.44	3.83	3.73	4.72	4.66	3.78	3.71	4.19	4.54	3.70	3.62	4.11	4.21	4.11	4.02

- = no data available

Prices are not adjusted for inflation.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Regions refer to U.S. Census divisions.

 See "Census division" in EIA's Energy Glossary (<http://www.eia.doe.gov/glossary/index.html>) for a list of States in each region.

Historical data: Latest data available from Energy Information Administration databases supporting the *Natural Gas Monthly*, DOE/EIA-0130.

 Natural gas Henry Hub spot price from Reuter's News Service (<http://www.reuters.com>).

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 6. U.S. Coal Supply, Consumption, and Inventories

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Supply (million short tons)															
Production	187.6	180.8	194.7	190.6	<i>185.6</i>	<i>158.1</i>	<i>191.5</i>	<i>187.0</i>	<i>184.1</i>	<i>147.2</i>	<i>173.2</i>	<i>176.9</i>	753.7	<i>722.2</i>	<i>681.5</i>
Appalachia	50.0	51.6	49.0	50.7	<i>53.8</i>	<i>46.2</i>	<i>46.4</i>	<i>42.2</i>	<i>47.4</i>	<i>40.3</i>	<i>41.0</i>	<i>41.2</i>	201.2	<i>188.6</i>	<i>169.8</i>
Interior	34.0	34.6	34.7	33.9	<i>34.5</i>	<i>29.0</i>	<i>37.1</i>	<i>38.9</i>	<i>36.4</i>	<i>29.6</i>	<i>35.8</i>	<i>37.6</i>	137.1	<i>139.6</i>	<i>139.4</i>
Western	103.7	94.6	111.0	106.0	<i>97.3</i>	<i>82.9</i>	<i>107.9</i>	<i>105.9</i>	<i>100.4</i>	<i>77.4</i>	<i>96.4</i>	<i>98.1</i>	415.3	<i>394.0</i>	<i>372.3</i>
Primary Inventory Withdrawals	-2.8	2.3	1.1	-0.7	<i>0.7</i>	<i>1.2</i>	<i>0.9</i>	<i>-3.3</i>	<i>-1.1</i>	<i>1.2</i>	<i>0.9</i>	<i>-3.5</i>	-0.1	<i>-0.5</i>	<i>-2.5</i>
Imports	1.4	1.5	1.4	1.3	<i>1.2</i>	<i>1.4</i>	<i>1.7</i>	<i>1.7</i>	<i>1.4</i>	<i>1.4</i>	<i>1.7</i>	<i>1.4</i>	5.7	<i>6.0</i>	<i>6.0</i>
Exports	27.2	30.9	29.1	28.9	<i>27.1</i>	<i>24.9</i>	<i>24.4</i>	<i>24.1</i>	<i>22.6</i>	<i>23.7</i>	<i>23.3</i>	<i>23.2</i>	116.1	<i>100.6</i>	<i>92.7</i>
Metallurgical Coal	14.9	16.9	14.5	15.5	<i>13.7</i>	<i>12.8</i>	<i>13.2</i>	<i>13.1</i>	<i>11.8</i>	<i>12.3</i>	<i>13.1</i>	<i>12.9</i>	61.8	<i>52.9</i>	<i>50.1</i>
Steam Coal	12.3	13.9	14.5	13.4	<i>13.4</i>	<i>12.1</i>	<i>11.2</i>	<i>11.0</i>	<i>10.8</i>	<i>11.4</i>	<i>10.2</i>	<i>10.2</i>	54.2	<i>47.7</i>	<i>42.6</i>
Total Primary Supply	159.0	153.7	168.1	162.4	<i>160.4</i>	<i>135.8</i>	<i>169.7</i>	<i>161.3</i>	<i>161.8</i>	<i>126.1</i>	<i>152.6</i>	<i>151.7</i>	643.3	<i>627.1</i>	<i>592.2</i>
Secondary Inventory Withdrawals	11.9	4.9	20.4	-2.8	<i>-0.1</i>	<i>1.1</i>	<i>3.8</i>	<i>-8.5</i>	<i>0.4</i>	<i>1.5</i>	<i>5.6</i>	<i>-9.6</i>	34.3	<i>-3.8</i>	<i>-2.1</i>
Waste Coal (a)	2.8	2.3	2.6	2.5	<i>2.3</i>	<i>2.3</i>	<i>2.3</i>	<i>2.3</i>	<i>2.3</i>	<i>2.3</i>	<i>2.3</i>	<i>2.3</i>	10.1	<i>9.3</i>	<i>9.2</i>
Total Supply	173.6	160.9	191.2	162.1	<i>162.7</i>	<i>139.2</i>	<i>175.7</i>	<i>155.0</i>	<i>164.5</i>	<i>129.8</i>	<i>160.5</i>	<i>144.4</i>	687.7	<i>632.7</i>	<i>599.2</i>
Consumption (million short tons)															
Coke Plants	4.2	4.6	4.7	6.0	<i>5.1</i>	<i>4.6</i>	<i>5.3</i>	<i>6.4</i>	<i>5.0</i>	<i>4.7</i>	<i>5.6</i>	<i>6.7</i>	19.5	<i>21.4</i>	<i>21.9</i>
Electric Power Sector (b)	154.8	144.2	181.6	157.0	<i>152.8</i>	<i>126.9</i>	<i>162.9</i>	<i>140.9</i>	<i>151.3</i>	<i>117.6</i>	<i>147.7</i>	<i>130.3</i>	637.5	<i>583.4</i>	<i>546.9</i>
Retail and Other Industry	8.5	7.9	7.7	8.1	<i>8.1</i>	<i>7.6</i>	<i>7.5</i>	<i>7.7</i>	<i>8.2</i>	<i>7.5</i>	<i>7.3</i>	<i>7.4</i>	32.2	<i>31.0</i>	<i>30.4</i>
Residential and Commercial	0.4	0.2	0.2	0.3	<i>0.2</i>	<i>0.1</i>	<i>0.1</i>	<i>0.2</i>	<i>0.2</i>	<i>0.1</i>	<i>0.1</i>	<i>0.2</i>	1.0	<i>0.7</i>	<i>0.7</i>
Other Industrial	8.2	7.7	7.5	7.8	<i>7.9</i>	<i>7.5</i>	<i>7.4</i>	<i>7.5</i>	<i>7.9</i>	<i>7.4</i>	<i>7.2</i>	<i>7.2</i>	31.2	<i>30.3</i>	<i>29.7</i>
Total Consumption	167.6	156.6	194.1	171.0	<i>165.9</i>	<i>139.2</i>	<i>175.7</i>	<i>155.0</i>	<i>164.5</i>	<i>129.8</i>	<i>160.5</i>	<i>144.4</i>	689.3	<i>635.9</i>	<i>599.2</i>
Discrepancy (c)	6.1	4.2	-2.9	-9.0	<i>-3.2</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	-1.6	<i>-3.2</i>	<i>0.0</i>
End-of-period Inventories (million short tons)															
Primary Inventories (d)	26.8	24.5	23.4	24.1	<i>23.4</i>	<i>22.2</i>	<i>21.3</i>	<i>24.6</i>	<i>25.7</i>	<i>24.5</i>	<i>23.6</i>	<i>27.1</i>	24.1	<i>24.6</i>	<i>27.1</i>
Secondary Inventories	131.1	126.2	105.8	108.6	<i>108.7</i>	<i>107.6</i>	<i>103.8</i>	<i>112.4</i>	<i>112.0</i>	<i>110.6</i>	<i>104.9</i>	<i>114.5</i>	108.6	<i>112.4</i>	<i>114.5</i>
Electric Power Sector	126.4	121.4	100.7	103.6	<i>103.9</i>	<i>102.4</i>	<i>98.3</i>	<i>106.8</i>	<i>106.8</i>	<i>105.0</i>	<i>99.0</i>	<i>108.6</i>	103.6	<i>106.8</i>	<i>108.6</i>
Retail and General Industry	2.9	2.9	3.0	2.9	<i>3.1</i>	<i>3.1</i>	<i>3.2</i>	<i>3.2</i>	<i>3.3</i>	<i>3.3</i>	<i>3.5</i>	<i>3.4</i>	2.9	<i>3.2</i>	<i>3.4</i>
Coke Plants	1.5	1.6	1.8	1.9	<i>1.5</i>	<i>1.9</i>	<i>2.0</i>	<i>2.1</i>	<i>1.7</i>	<i>2.0</i>	<i>2.2</i>	<i>2.3</i>	1.9	<i>2.1</i>	<i>2.3</i>
Coal Market Indicators															
Coal Miner Productivity															
(Tons per hour)	6.10	6.10	6.10	6.10	<i>6.02</i>	<i>6.02</i>	<i>6.02</i>	<i>6.02</i>	<i>6.01</i>	<i>6.01</i>	<i>6.01</i>	<i>6.01</i>	6.10	<i>6.02</i>	<i>6.01</i>
Total Raw Steel Production															
(Million short tons per day)	0.251	0.253	0.263	0.270	<i>0.287</i>	<i>0.290</i>	<i>0.276</i>	<i>0.246</i>	<i>0.306</i>	<i>0.303</i>	<i>0.280</i>	<i>0.244</i>	0.259	<i>0.274</i>	<i>0.283</i>
Cost of Coal to Electric Utilities															
(Dollars per million Btu)	2.06	2.06	2.06	2.07	<i>2.09</i>	<i>2.07</i>	<i>2.06</i>	<i>2.07</i>	<i>2.09</i>	<i>2.08</i>	<i>2.07</i>	<i>2.07</i>	2.06	<i>2.07</i>	<i>2.08</i>

- = no data available

(a) Waste coal includes waste coal and coal slurry reprocessed into briquettes.

(b) Coal used for electricity generation and (a limited amount of) useful thermal output by electric utilities and independent power producers.

(c) The discrepancy reflects an unaccounted-for shipper and receiver reporting difference, assumed to be zero in the forecast period.

(d) Primary stocks are held at the mines and distribution points.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.**Historical data:** Latest data available from Energy Information Administration databases supporting the following reports: *Quarterly Coal Report*, DOE/EIA-0121; and *Electric Power Monthly*, DOE/EIA-0226.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 7a. U.S. Electricity Industry Overview

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Electricity Supply (billion kilowatthours per day)															
Electricity Generation	11.13	11.14	12.82	10.76	<i>11.03</i>	<i>10.79</i>	<i>12.46</i>	<i>10.64</i>	<i>11.10</i>	<i>10.84</i>	<i>12.51</i>	<i>10.67</i>	11.47	<i>11.23</i>	<i>11.28</i>
Electric Power Sector (a)	10.69	10.71	12.37	10.32	<i>10.58</i>	<i>10.35</i>	<i>12.01</i>	<i>10.21</i>	<i>10.65</i>	<i>10.40</i>	<i>12.05</i>	<i>10.23</i>	11.03	<i>10.79</i>	<i>10.83</i>
Comm. and Indus. Sectors (b)	0.43	0.43	0.45	0.44	<i>0.45</i>	<i>0.44</i>	<i>0.45</i>	<i>0.44</i>	<i>0.45</i>	<i>0.44</i>	<i>0.46</i>	<i>0.45</i>	0.44	<i>0.44</i>	<i>0.45</i>
Net Imports	0.13	0.12	0.14	0.10	<i>0.13</i>	<i>0.14</i>	<i>0.17</i>	<i>0.13</i>	<i>0.15</i>	<i>0.15</i>	<i>0.17</i>	<i>0.13</i>	0.12	<i>0.14</i>	<i>0.15</i>
Total Supply	11.26	11.27	12.96	10.86	<i>11.16</i>	<i>10.93</i>	<i>12.62</i>	<i>10.77</i>	<i>11.25</i>	<i>10.99</i>	<i>12.68</i>	<i>10.81</i>	11.59	<i>11.37</i>	<i>11.43</i>
Losses and Unaccounted for (c)	0.65	0.94	0.84	0.71	<i>0.64</i>	<i>0.82</i>	<i>0.73</i>	<i>0.68</i>	<i>0.59</i>	<i>0.82</i>	<i>0.74</i>	<i>0.68</i>	0.79	<i>0.72</i>	<i>0.71</i>
Electricity Consumption (billion kilowatthours per day unless noted)															
Retail Sales	10.23	9.95	11.72	9.76	<i>10.12</i>	<i>9.72</i>	<i>11.49</i>	<i>9.71</i>	<i>10.26</i>	<i>9.78</i>	<i>11.54</i>	<i>9.73</i>	10.42	<i>10.26</i>	<i>10.33</i>
Residential Sector	4.10	3.61	4.72	3.59	<i>4.00</i>	<i>3.41</i>	<i>4.53</i>	<i>3.53</i>	<i>4.10</i>	<i>3.45</i>	<i>4.57</i>	<i>3.56</i>	4.00	<i>3.87</i>	<i>3.92</i>
Commercial Sector	3.61	3.71	4.21	3.56	<i>3.60</i>	<i>3.66</i>	<i>4.15</i>	<i>3.56</i>	<i>3.62</i>	<i>3.68</i>	<i>4.17</i>	<i>3.57</i>	3.77	<i>3.74</i>	<i>3.76</i>
Industrial Sector	2.50	2.62	2.77	2.59	<i>2.51</i>	<i>2.64</i>	<i>2.79</i>	<i>2.60</i>	<i>2.52</i>	<i>2.63</i>	<i>2.78</i>	<i>2.59</i>	2.62	<i>2.64</i>	<i>2.63</i>
Transportation Sector	0.02	0.02	0.02	0.02	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	<i>0.02</i>	0.02	<i>0.02</i>	<i>0.02</i>
Direct Use (d)	0.38	0.38	0.40	0.39	<i>0.40</i>	<i>0.38</i>	<i>0.39</i>	<i>0.38</i>	<i>0.40</i>	<i>0.39</i>	<i>0.40</i>	<i>0.39</i>	0.39	<i>0.39</i>	<i>0.40</i>
Total Consumption	10.61	10.32	12.12	10.15	<i>10.52</i>	<i>10.11</i>	<i>11.89</i>	<i>10.09</i>	<i>10.66</i>	<i>10.17</i>	<i>11.95</i>	<i>10.13</i>	10.80	<i>10.65</i>	<i>10.73</i>
Average residential electricity usage per customer (kWh)	2,754	2,446	3,238	2,474	<i>2,660</i>	<i>2,289</i>	<i>3,074</i>	<i>2,392</i>	<i>2,722</i>	<i>2,286</i>	<i>3,068</i>	<i>2,385</i>	10,912	<i>10,415</i>	<i>10,461</i>
Prices															
Power Generation Fuel Costs (dollars per million Btu)															
Coal	2.06	2.06	2.06	2.07	<i>2.09</i>	<i>2.07</i>	<i>2.06</i>	<i>2.07</i>	<i>2.09</i>	<i>2.08</i>	<i>2.07</i>	<i>2.07</i>	2.06	<i>2.07</i>	<i>2.08</i>
Natural Gas	3.96	3.09	3.23	3.99	<i>3.49</i>	<i>2.85</i>	<i>2.77</i>	<i>3.29</i>	<i>3.55</i>	<i>2.73</i>	<i>2.63</i>	<i>3.18</i>	3.52	<i>3.06</i>	<i>2.97</i>
Residual Fuel Oil	11.47	13.02	13.87	14.17	<i>12.25</i>	<i>12.73</i>	<i>11.74</i>	<i>11.53</i>	<i>12.08</i>	<i>12.88</i>	<i>12.19</i>	<i>11.96</i>	12.86	<i>12.07</i>	<i>12.25</i>
Distillate Fuel Oil	15.77	16.61	16.82	16.29	<i>14.81</i>	<i>14.82</i>	<i>14.93</i>	<i>15.65</i>	<i>16.15</i>	<i>16.59</i>	<i>16.51</i>	<i>16.59</i>	16.17	<i>15.05</i>	<i>16.43</i>
Retail Prices (cents per kilowatthour)															
Residential Sector	12.59	13.03	13.15	12.81	<i>12.94</i>	<i>13.51</i>	<i>13.46</i>	<i>13.08</i>	<i>13.08</i>	<i>13.73</i>	<i>13.68</i>	<i>13.31</i>	12.91	<i>13.25</i>	<i>13.45</i>
Commercial Sector	10.54	10.59	10.89	10.57	<i>10.60</i>	<i>10.64</i>	<i>10.87</i>	<i>10.54</i>	<i>10.57</i>	<i>10.54</i>	<i>10.82</i>	<i>10.58</i>	10.66	<i>10.67</i>	<i>10.63</i>
Industrial Sector	6.81	6.87	7.23	6.83	<i>6.77</i>	<i>6.90</i>	<i>7.26</i>	<i>6.85</i>	<i>6.79</i>	<i>6.98</i>	<i>7.35</i>	<i>6.94</i>	6.94	<i>6.95</i>	<i>7.02</i>

- = no data available. kWh = kilowatthours. Btu = British thermal units.

Prices are not adjusted for inflation.

(a) Generation supplied by electricity-only and combined-heat-and-power (CHP) plants operated by electric utilities and independent power producers.

(b) Generation supplied by CHP and electricity-only plants operated by businesses in the commercial and industrial sectors, primarily for onsite use.

(c) Includes transmission and distribution losses, data collection time-frame differences, and estimation error.

 (d) Direct Use represents commercial and industrial facility use of onsite net electricity generation; and electrical sales or transfers to adjacent or colocated facilities for which revenue information is not available. See Table 7.6 of the EIA *Monthly Energy Review*.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: *Electric Power Monthly*, DOE/EIA-0226; and *Electric Power Annual*, DOE/EIA-0348.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 7b. U.S. Regional Electricity Retail Sales (Million Kilowatthours per Day)
U.S. Energy Information Administration | Short-Term Energy Outlook - February 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Residential Sector															
New England	140	111	153	122	140	111	139	119	141	112	140	120	131	127	128
Middle Atlantic	394	323	453	334	391	314	417	327	393	314	417	327	376	362	363
E. N. Central	552	480	604	482	542	441	573	475	546	443	575	477	530	508	510
W. N. Central	327	274	318	270	315	244	317	266	323	249	323	270	297	285	291
S. Atlantic	1,040	920	1,184	930	1,001	877	1,147	897	1,042	886	1,158	905	1,019	981	998
E. S. Central	368	301	396	300	349	277	383	287	366	278	385	289	341	324	329
W. S. Central	608	582	803	526	580	541	783	521	600	551	797	529	630	607	619
Mountain	239	263	360	234	245	257	351	237	248	261	356	240	274	273	276
Pacific contiguous	422	339	435	377	420	338	408	384	430	340	410	386	393	387	392
AK and HI	14	12	13	13	14	12	13	13	14	12	12	13	13	13	13
Total	4,103	3,605	4,719	3,589	3,996	3,412	4,532	3,527	4,102	3,445	4,573	3,556	4,005	3,867	3,920
Commercial Sector															
New England	141	136	160	136	140	135	152	134	137	132	147	128	143	140	136
Middle Atlantic	431	411	480	412	429	406	462	409	427	403	459	407	434	427	424
E. N. Central	499	501	556	481	497	487	545	479	497	486	544	478	509	502	501
W. N. Central	282	282	308	272	280	273	309	273	283	275	312	274	286	284	286
S. Atlantic	811	862	975	817	803	850	958	807	807	852	959	808	867	855	856
E. S. Central	242	253	296	237	241	246	292	235	245	248	293	235	257	254	255
W. S. Central	501	549	637	516	508	550	649	528	529	572	671	540	551	559	578
Mountain	249	270	310	252	251	267	307	255	252	268	309	256	270	270	271
Pacific contiguous	435	424	470	426	432	426	459	426	433	426	460	427	439	436	436
AK and HI	16	15	16	16	16	15	16	15	16	15	15	15	16	15	15
Total	3,606	3,705	4,205	3,565	3,597	3,657	4,150	3,562	3,625	3,679	4,169	3,569	3,771	3,742	3,761
Industrial Sector															
New England	42	43	47	43	40	42	45	42	39	41	44	42	44	42	42
Middle Atlantic	196	194	214	193	198	196	216	195	199	196	215	194	200	201	201
E. N. Central	499	517	530	501	500	520	533	502	498	516	526	495	512	514	509
W. N. Central	232	242	258	245	236	247	264	251	241	252	267	254	244	250	254
S. Atlantic	366	388	404	375	362	384	400	371	357	377	390	361	383	379	371
E. S. Central	257	261	286	262	254	258	284	261	251	254	277	254	267	264	259
W. S. Central	467	500	511	506	475	510	522	514	485	518	528	520	496	506	513
Mountain	208	229	251	218	212	233	257	223	216	235	259	225	227	231	234
Pacific contiguous	216	231	258	228	216	232	258	229	217	233	258	228	233	234	234
AK and HI	13	13	14	13	13	13	14	14	13	13	14	14	13	13	13
Total	2,498	2,618	2,773	2,586	2,508	2,637	2,792	2,601	2,516	2,634	2,780	2,587	2,619	2,635	2,630
Total All Sectors (a)															
New England	325	292	361	303	322	290	338	297	319	286	333	291	320	312	307
Middle Atlantic	1,033	939	1,157	950	1,030	925	1,105	941	1,030	923	1,102	938	1,020	1,000	998
E. N. Central	1,552	1,500	1,691	1,466	1,541	1,450	1,652	1,458	1,543	1,447	1,647	1,452	1,552	1,525	1,522
W. N. Central	841	798	883	788	831	765	891	790	847	776	902	799	828	819	831
S. Atlantic	2,220	2,174	2,567	2,126	2,170	2,115	2,508	2,079	2,209	2,118	2,510	2,077	2,272	2,219	2,229
E. S. Central	867	815	979	799	844	782	959	783	862	780	956	778	865	842	844
W. S. Central	1,577	1,632	1,951	1,549	1,564	1,602	1,955	1,564	1,614	1,642	1,997	1,590	1,678	1,672	1,711
Mountain	697	762	921	704	708	757	916	716	716	765	924	721	772	774	782
Pacific contiguous	1,075	996	1,166	1,032	1,071	999	1,128	1,041	1,081	1,001	1,131	1,043	1,067	1,060	1,064
AK and HI	42	41	42	42	42	40	42	42	42	40	42	42	42	42	42
Total	10,230	9,948	11,718	9,759	10,122	9,725	11,494	9,709	10,264	9,778	11,542	9,732	10,416	10,265	10,331

- = no data available

(a) Total retail sales to all sectors includes residential, commercial, industrial, and transportation sector sales.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Retail Sales represents total retail electricity sales by electric utilities and power marketers.

Regions refer to U.S. Census divisions.

See "Census division" in EIA's Energy Glossary (<http://www.eia.doe.gov/glossary/index.html>) for a list of States in each region.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: *Electric Power Monthly*, DOE/EIA-0226; and *Electric Power Annual*, DOE/EIA-0348.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 7c. U.S. Regional Retail Electricity Prices (Cents per Kilowatthour)
U.S. Energy Information Administration | Short-Term Energy Outlook - February 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Residential Sector															
New England	20.56	20.58	20.39	20.44	21.42	21.49	21.59	21.14	21.87	21.91	22.11	21.77	20.49	21.42	21.92
Middle Atlantic	15.62	16.22	16.33	15.85	15.80	16.55	16.70	16.06	16.00	16.81	17.01	16.37	16.02	16.28	16.55
E. N. Central	12.94	13.48	13.09	13.26	13.28	14.05	13.58	13.65	13.64	14.44	13.97	14.07	13.18	13.62	14.01
W. N. Central	10.90	12.63	13.10	11.55	11.22	13.22	13.45	11.86	11.46	13.53	13.78	12.15	12.04	12.42	12.71
S. Atlantic	11.66	11.91	11.82	11.74	11.94	12.23	12.11	11.97	12.00	12.33	12.22	12.11	11.78	12.06	12.16
E. S. Central	10.86	11.40	11.16	11.22	11.16	11.88	11.47	11.49	11.25	12.10	11.73	11.79	11.15	11.48	11.69
W. S. Central	10.53	11.01	10.97	10.88	10.83	11.37	11.10	10.82	10.69	11.31	11.14	10.90	10.85	11.04	11.02
Mountain	11.58	12.25	12.26	11.83	11.78	12.53	12.52	12.05	12.01	12.79	12.79	12.32	12.02	12.26	12.51
Pacific	14.88	15.28	17.20	14.68	15.25	15.86	17.72	15.13	15.74	16.49	18.12	15.36	15.56	16.01	16.43
U.S. Average	12.59	13.03	13.15	12.81	12.94	13.51	13.46	13.08	13.08	13.73	13.68	13.31	12.91	13.25	13.45
Commercial Sector															
New England	16.61	15.91	16.18	16.35	16.47	15.22	15.58	15.64	16.13	14.48	14.92	15.29	16.26	15.73	15.21
Middle Atlantic	12.08	12.22	13.15	12.10	12.00	12.13	13.04	12.09	11.87	11.99	13.00	12.22	12.41	12.34	12.29
E. N. Central	10.10	10.15	10.08	10.16	10.21	10.34	10.26	10.31	10.30	10.45	10.40	10.48	10.12	10.28	10.41
W. N. Central	9.18	10.03	10.38	9.27	9.25	10.27	10.60	9.51	9.37	10.46	10.86	9.82	9.73	9.93	10.15
S. Atlantic	9.61	9.30	9.18	9.48	9.98	9.49	9.26	9.52	10.15	9.49	9.24	9.54	9.38	9.54	9.59
E. S. Central	10.51	10.48	10.34	10.58	10.21	10.45	10.35	10.62	10.00	10.37	10.39	10.79	10.47	10.40	10.38
W. S. Central	8.37	8.17	8.12	8.01	7.83	7.66	7.62	7.67	7.32	7.13	7.27	7.58	8.16	7.69	7.32
Mountain	9.26	9.87	9.99	9.43	9.14	9.84	10.00	9.45	9.13	9.83	10.01	9.51	9.66	9.63	9.64
Pacific	12.90	14.02	15.87	13.86	13.45	14.56	16.45	13.97	13.91	14.85	16.65	13.94	14.21	14.64	14.87
U.S. Average	10.54	10.59	10.89	10.57	10.60	10.64	10.87	10.54	10.57	10.54	10.82	10.58	10.66	10.67	10.63
Industrial Sector															
New England	13.48	12.61	12.82	13.04	14.26	13.17	13.20	13.28	14.90	13.56	13.46	13.44	12.98	13.46	13.82
Middle Atlantic	7.20	6.80	6.85	6.85	6.89	6.63	6.72	6.69	6.74	6.52	6.67	6.66	6.92	6.73	6.65
E. N. Central	7.10	6.96	6.99	7.03	7.00	6.95	7.00	7.06	7.04	7.03	7.07	7.13	7.02	7.00	7.07
W. N. Central	7.05	7.38	7.99	6.85	7.15	7.50	8.12	6.96	7.26	7.64	8.25	7.07	7.33	7.45	7.57
S. Atlantic	6.54	6.40	6.60	6.49	6.49	6.45	6.62	6.48	6.47	6.51	6.69	6.56	6.51	6.51	6.56
E. S. Central	5.74	5.93	5.87	5.92	5.82	6.05	5.96	5.99	5.92	6.21	6.09	6.12	5.87	5.96	6.08
W. S. Central	5.42	5.41	5.67	5.33	5.20	5.33	5.60	5.27	5.06	5.31	5.62	5.35	5.46	5.36	5.34
Mountain	6.10	6.48	6.93	6.02	6.11	6.57	7.07	6.16	6.28	6.76	7.27	6.33	6.41	6.51	6.69
Pacific	8.63	9.53	11.19	9.81	8.84	9.63	11.31	9.89	8.98	9.73	11.41	9.96	9.85	9.98	10.08
U.S. Average	6.81	6.87	7.23	6.83	6.77	6.90	7.26	6.85	6.79	6.98	7.35	6.94	6.94	6.95	7.02
All Sectors (a)															
New England	17.88	17.16	17.49	17.48	18.32	17.29	17.71	17.49	18.48	17.22	17.73	17.66	17.51	17.71	17.79
Middle Atlantic	12.48	12.46	13.22	12.34	12.45	12.45	13.17	12.34	12.44	12.46	13.27	12.50	12.66	12.62	12.69
E. N. Central	10.14	10.11	10.18	10.11	10.25	10.25	10.35	10.28	10.43	10.45	10.58	10.51	10.14	10.28	10.49
W. N. Central	9.26	10.12	10.66	9.31	9.40	10.32	10.88	9.49	9.57	10.53	11.13	9.73	9.86	10.04	10.26
S. Atlantic	10.06	9.88	9.99	9.94	10.30	10.07	10.14	10.03	10.42	10.15	10.22	10.14	9.97	10.14	10.23
E. S. Central	9.24	9.36	9.36	9.30	9.29	9.50	9.50	9.40	9.34	9.63	9.68	9.63	9.32	9.42	9.57
W. S. Central	8.33	8.34	8.65	8.13	8.15	8.17	8.48	7.93	7.89	7.96	8.38	7.95	8.38	8.20	8.06
Mountain	9.11	9.67	10.04	9.16	9.15	9.75	10.14	9.29	9.28	9.89	10.31	9.46	9.54	9.62	9.78
Pacific	12.81	13.39	15.32	13.26	13.22	13.83	15.72	13.49	13.64	14.20	15.97	13.58	13.75	14.10	14.38
U.S. Average	10.45	10.50	10.94	10.41	10.57	10.63	11.01	10.47	10.65	10.70	11.12	10.61	10.59	10.69	10.78

- = no data available

Prices are not adjusted for inflation.

(a) Volume-weighted average of retail prices to residential, commercial, industrial, and transportation sectors.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Regions refer to U.S. Census divisions.

See "Census division" in EIA's Energy Glossary (<http://www.eia.doe.gov/glossary/index.html>) for a list of States in each region.

Historical data: Latest data available from Energy Information Administration databases supporting the following reports: *Electric Power Monthly*, DOE/EIA-0226; and *Electric Power Annual*, DOE/EIA-0348.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 7d. U.S. Regional Electricity Generation, All Sectors (Thousand megawatthours per day)

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
United States															
Coal	3,127	2,859	3,559	3,077	3,098	2,529	3,190	2,743	3,029	2,336	2,878	2,524	3,157	2,890	2,691
Natural Gas	3,456	3,806	5,160	3,660	3,573	3,831	5,027	3,659	3,565	3,943	5,327	3,825	4,024	4,026	4,167
Petroleum (a)	102	53	61	54	74	57	64	56	73	57	64	57	67	63	63
Other Gases	34	33	36	31	33	32	36	31	33	32	36	31	33	33	33
Nuclear	2,294	2,155	2,277	2,118	2,239	2,097	2,271	2,135	2,180	2,023	2,180	2,061	2,211	2,185	2,111
Renewable Energy Sources:	2,094	2,212	1,718	1,799	1,987	2,219	1,850	1,998	2,201	2,428	2,007	2,153	1,954	2,013	2,196
Conventional Hydropower	856	944	696	688	712	840	705	666	780	889	730	682	795	730	770
Wind	869	821	582	757	901	917	677	942	1,020	1,036	758	1,043	756	859	964
Wood Biomass	119	113	115	111	116	114	122	116	119	115	123	117	114	117	119
Waste Biomass	61	58	57	59	57	58	59	59	58	58	59	59	59	58	58
Geothermal	46	45	46	46	46	45	45	46	46	45	45	47	46	45	46
Solar	142	232	222	139	155	245	242	170	179	285	292	204	184	203	240
Pumped Storage Hydropower	-15	-13	-22	-14	-13	-12	-18	-14	-13	-12	-18	-14	-16	-14	-14
Other Nonrenewable Fuels (b)	36	35	32	36	35	36	36	36	35	36	36	36	35	36	36
Total Generation	11,128	11,141	12,822	10,761	11,026	10,788	12,457	10,644	11,103	10,842	12,510	10,673	11,466	11,231	11,284
Northeast Census Region															
Coal	149	120	132	141	179	73	73	119	183	75	54	101	136	111	103
Natural Gas	500	527	783	548	552	607	775	591	556	635	822	614	590	632	657
Petroleum (a)	32	3	3	3	13	2	4	4	11	2	4	5	10	6	5
Other Gases	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Nuclear	552	507	525	497	512	476	507	463	473	429	459	435	520	489	449
Hydropower (c)	108	114	106	117	105	106	102	102	105	103	99	101	111	104	102
Other Renewables (d)	81	76	72	75	83	76	70	84	87	79	72	87	76	78	81
Other Nonrenewable Fuels (b)	11	10	11	11	11	11	12	12	11	11	11	12	11	11	11
Total Generation	1,435	1,359	1,635	1,394	1,456	1,354	1,544	1,376	1,427	1,335	1,524	1,357	1,456	1,433	1,411
South Census Region															
Coal	1,262	1,260	1,529	1,253	1,253	1,089	1,379	1,094	1,223	996	1,214	986	1,326	1,204	1,105
Natural Gas	2,049	2,345	2,955	2,061	1,990	2,324	2,913	2,067	2,057	2,415	3,090	2,167	2,354	2,325	2,433
Petroleum (a)	39	21	26	20	29	25	28	22	30	25	28	22	26	26	26
Other Gases	13	12	14	12	12	12	13	12	12	11	13	12	13	12	12
Nuclear	1,008	952	1,010	934	1,008	947	1,032	978	998	937	1,018	965	976	991	980
Hydropower (c)	114	127	112	136	111	118	107	117	111	114	104	117	122	114	112
Other Renewables (d)	452	494	375	405	476	522	431	487	535	593	493	543	431	479	541
Other Nonrenewable Fuels (b)	16	16	11	16	15	15	15	15	15	15	14	15	15	15	15
Total Generation	4,952	5,227	6,031	4,837	4,895	5,051	5,917	4,793	4,982	5,107	5,975	4,826	5,264	5,166	5,224
Midwest Census Region															
Coal	1,303	1,140	1,386	1,237	1,219	1,000	1,250	1,087	1,182	955	1,194	1,044	1,267	1,139	1,094
Natural Gas	403	441	552	388	430	409	567	387	416	411	611	409	446	449	462
Petroleum (a)	10	7	9	8	10	9	10	8	10	9	10	8	8	9	9
Other Gases	13	12	14	11	12	12	14	11	13	13	15	12	12	12	13
Nuclear	571	539	569	533	553	519	564	534	546	505	536	503	553	542	522
Hydropower (c)	57	58	36	42	56	55	36	37	55	54	35	36	48	46	45
Other Renewables (d)	367	303	234	332	399	372	274	441	467	437	317	498	309	371	429
Other Nonrenewable Fuels (b)	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4
Total Generation	2,727	2,505	2,804	2,554	2,683	2,380	2,719	2,510	2,692	2,386	2,722	2,514	2,647	2,573	2,579
West Census Region															
Coal	413	339	512	446	447	366	488	443	441	310	415	392	428	436	389
Natural Gas	503	493	871	664	601	492	773	614	535	482	803	635	634	620	615
Petroleum (a)	21	21	23	24	22	21	22	22	22	21	23	22	22	22	22
Other Gases	7	7	7	6	7	7	6	6	7	7	7	6	6	6	6
Nuclear	164	158	173	154	165	155	169	160	163	153	166	158	162	162	160
Hydropower (c)	562	632	420	379	427	548	442	395	496	605	474	414	497	453	497
Other Renewables (d)	338	395	341	298	316	409	370	320	332	430	394	342	343	354	375
Other Nonrenewable Fuels (b)	6	6	6	5	5	6	6	6	5	6	6	6	6	6	6
Total Generation	2,014	2,051	2,352	1,976	1,991	2,003	2,276	1,966	2,001	2,014	2,288	1,975	2,099	2,060	2,070

(a) Residual fuel oil, distillate fuel oil, petroleum coke, and other petroleum liquids.

(b) Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, nonrenewable waste, and miscellaneous technologies.

(c) Conventional hydroelectric and pumped storage generation.

(d) Wind, biomass, geothermal, and solar generation.

Notes: Data reflect generation supplied by electricity-only and combined-heat-and-power (CHP) plants operated by electric utilities, independent power producers, and the commercial and industrial sectors. The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Historical data: Latest data available from U.S. Energy Information Administration *Electric Power Monthly* and *Electric Power Annual*.

Projections: EIA Regional Short-Term Energy Model.

Table 7e. U.S. Regional Fuel Consumption for Electricity Generation, All Sectors

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Fuel Consumption for Electricity Generation, All Sectors															
United States															
Coal (thousand st/d)	1,717	1,583	1,972	1,704	1,693	1,390	1,765	1,526	1,657	1,287	1,600	1,410	1,745	1,593	1,489
Natural Gas (million cf/d)	25,473	28,252	38,455	26,670	26,032	28,420	37,696	26,680	25,935	29,215	39,906	27,852	29,740	29,731	30,744
Petroleum (thousand b/d)	180	96	111	96	132	103	116	102	132	103	116	104	120	113	114
Residual Fuel Oil	51	27	30	27	39	24	28	25	36	25	29	28	33	29	30
Distillate Fuel Oil	71	26	22	26	33	25	25	28	35	25	25	28	36	27	28
Petroleum Coke (a)	48	40	54	39	55	50	59	45	56	50	59	45	45	52	52
Other Petroleum Liquids (b)	9	4	5	5	6	3	4	4	5	3	4	4	6	4	4
Northeast Census Region															
Coal (thousand st/d)	77	63	69	74	92	38	39	62	94	39	29	53	71	58	54
Natural Gas (million cf/d)	3,815	3,894	5,823	3,975	4,096	4,540	5,904	4,362	4,131	4,745	6,261	4,533	4,381	4,729	4,920
Petroleum (thousand b/d)	53	6	6	5	22	4	7	7	19	4	7	9	17	10	10
South Census Region															
Coal (thousand st/d)	659	670	821	679	654	573	732	586	637	526	648	531	708	636	586
Natural Gas (million cf/d)	14,730	17,258	21,785	14,960	14,274	17,098	21,609	14,933	14,715	17,731	22,870	15,608	17,197	16,993	17,739
Petroleum (thousand b/d)	72	39	48	37	54	46	52	42	57	46	51	42	49	48	49
Midwest Census Region															
Coal (thousand st/d)	743	654	793	697	689	570	715	622	671	545	683	598	722	649	624
Natural Gas (million cf/d)	3,135	3,415	4,309	2,924	3,214	3,098	4,413	2,884	3,108	3,111	4,750	3,036	3,448	3,404	3,503
Petroleum (thousand b/d)	19	15	17	14	19	18	20	17	19	18	20	16	16	18	18
West Census Region															
Coal (thousand st/d)	239	195	290	254	258	209	279	256	255	178	240	228	245	250	225
Natural Gas (million cf/d)	3,793	3,685	6,538	4,811	4,448	3,684	5,770	4,502	3,981	3,628	6,024	4,675	4,715	4,605	4,581
Petroleum (thousand b/d)	36	36	39	39	37	35	37	36	37	35	38	37	38	36	37
End-of-period U.S. Fuel Inventories Held by Electric Power Sector															
Coal (million short tons)	126.4	121.4	100.7	103.6	103.9	102.4	98.3	106.8	106.8	105.0	99.0	108.6	103.6	106.8	108.6
Residual Fuel Oil (mmb)	10.1	9.9	8.5	9.0	9.7	10.1	10.4	10.9	10.7	10.7	10.6	10.9	9.0	10.9	10.9
Distillate Fuel Oil (mmb)	14.8	14.6	14.2	14.7	15.0	15.1	15.2	15.5	15.7	15.6	15.5	15.7	14.7	15.5	15.7
Petroleum Coke (mmb)	4.8	4.1	3.7	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.6	3.6	3.5	3.5	3.6

(a) Petroleum coke consumption converted from short tons to barrels by multiplying by five.

(b) Other petroleum liquids include jet fuel, kerosene, and waste oil.

Notes: Data reflect generation supplied by electricity-only and combined-heat-and-power (CHP) plants operated by electric utilities, independent power producers, and the commercial and industrial sectors. Data include fuel consumed only for generation of electricity. Values do not include consumption by CHP plants for useful thermal output.

The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Physical Units: st/d = short tons per day; b/d = barrels per day; cf/d = cubic feet per day; mmb = million barrels.

Historical data: Latest data available from U.S. Energy Information Administration *Electric Power Monthly* and *Electric Power Annual*.

Projections: EIA Regional Short-Term Energy Model.

Table 8a. U.S. Renewable Energy Consumption (Quadrillion Btu)

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Electric Power Sector															
Geothermal	0.038	0.038	0.039	0.039	0.038	0.038	0.038	0.039	0.038	0.038	0.038	0.040	0.154	0.153	0.155
Hydroelectric Power (a)	0.706	0.787	0.587	0.580	0.587	0.701	0.596	0.562	0.652	0.743	0.617	0.575	2.660	2.446	2.586
Solar (b)	0.116	0.193	0.186	0.117	0.127	0.203	0.203	0.142	0.148	0.236	0.245	0.171	0.613	0.676	0.800
Waste Biomass (c)	0.073	0.070	0.067	0.070	0.067	0.069	0.071	0.070	0.068	0.069	0.071	0.070	0.281	0.276	0.279
Wood Biomass	0.058	0.053	0.056	0.052	0.054	0.054	0.066	0.060	0.060	0.056	0.068	0.061	0.218	0.235	0.245
Wind	0.722	0.689	0.494	0.642	0.748	0.770	0.574	0.799	0.856	0.870	0.643	0.885	2.546	2.892	3.254
Subtotal	1.714	1.830	1.429	1.499	1.622	1.835	1.548	1.672	1.821	2.011	1.682	1.803	6.472	6.678	7.318
Industrial Sector															
Biofuel Losses and Co-products (d)	0.202	0.204	0.211	0.214	0.202	0.206	0.206	0.206	0.204	0.207	0.208	0.206	0.831	0.820	0.825
Geothermal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.004	0.004
Hydroelectric Power (a)	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.013	0.013	0.013
Solar (b)	0.005	0.007	0.008	0.005	0.006	0.008	0.009	0.006	0.007	0.010	0.010	0.007	0.025	0.029	0.033
Waste Biomass (c)	0.044	0.041	0.039	0.044	0.042	0.041	0.041	0.043	0.042	0.041	0.041	0.043	0.167	0.167	0.167
Wood Biomass	0.381	0.382	0.389	0.379	0.357	0.349	0.359	0.361	0.350	0.346	0.358	0.360	1.531	1.426	1.413
Subtotal	0.636	0.635	0.647	0.646	0.610	0.605	0.615	0.619	0.604	0.604	0.616	0.617	2.565	2.448	2.440
Commercial Sector															
Geothermal	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.020	0.020	0.020
Solar (b)	0.019	0.029	0.029	0.020	0.023	0.034	0.035	0.025	0.029	0.041	0.042	0.030	0.096	0.117	0.142
Waste Biomass (c)	0.011	0.011	0.010	0.012	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.045	0.044	0.044
Wood Biomass	0.021	0.021	0.021	0.021	0.021	0.021	0.022	0.021	0.021	0.021	0.022	0.021	0.084	0.084	0.084
Subtotal	0.063	0.072	0.072	0.065	0.067	0.078	0.079	0.069	0.073	0.085	0.087	0.074	0.273	0.293	0.319
Residential Sector															
Geothermal	0.010	0.010	0.010	0.012	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.042	0.053	0.053
Solar (e)	0.043	0.066	0.066	0.046	0.049	0.076	0.078	0.054	0.058	0.088	0.090	0.062	0.221	0.256	0.298
Wood Biomass	0.128	0.129	0.130	0.113	0.105	0.105	0.105	0.105	0.105	0.105	0.105	0.105	0.500	0.420	0.420
Subtotal	0.180	0.205	0.207	0.171	0.167	0.194	0.196	0.172	0.176	0.206	0.208	0.181	0.762	0.729	0.770
Transportation Sector															
Biomass-based Diesel (f)	0.054	0.068	0.071	0.068	0.063	0.078	0.083	0.096	0.072	0.085	0.089	0.094	0.262	0.321	0.341
Ethanol (f)	0.273	0.286	0.294	0.296	0.274	0.296	0.297	0.289	0.277	0.297	0.299	0.288	1.148	1.156	1.161
Subtotal	0.327	0.354	0.365	0.369	0.337	0.373	0.380	0.385	0.349	0.382	0.389	0.382	1.416	1.476	1.502
All Sectors Total															
Biomass-based Diesel (f)	0.054	0.068	0.071	0.068	0.063	0.078	0.083	0.096	0.072	0.085	0.089	0.094	0.262	0.321	0.341
Biofuel Losses and Co-products (d)	0.202	0.204	0.211	0.214	0.202	0.206	0.206	0.206	0.204	0.207	0.208	0.206	0.831	0.820	0.825
Ethanol (f)	0.283	0.297	0.305	0.301	0.286	0.307	0.308	0.300	0.288	0.308	0.311	0.299	1.186	1.201	1.206
Geothermal	0.054	0.053	0.055	0.056	0.057	0.057	0.057	0.058	0.057	0.057	0.058	0.059	0.219	0.229	0.231
Hydroelectric Power (a)	0.710	0.791	0.590	0.584	0.591	0.705	0.599	0.565	0.655	0.747	0.620	0.579	2.675	2.461	2.601
Solar (b)(e)	0.183	0.295	0.288	0.190	0.205	0.321	0.324	0.227	0.241	0.375	0.387	0.271	0.956	1.078	1.274
Waste Biomass (c)	0.128	0.122	0.117	0.126	0.120	0.121	0.122	0.124	0.121	0.121	0.123	0.125	0.493	0.487	0.490
Wood Biomass	0.588	0.585	0.596	0.567	0.537	0.529	0.552	0.546	0.535	0.528	0.552	0.546	2.335	2.164	2.162
Wind	0.722	0.689	0.494	0.642	0.748	0.770	0.574	0.799	0.856	0.870	0.643	0.885	2.546	2.892	3.254
Total Consumption	2.920	3.097	2.720	2.790	2.803	3.085	2.818	2.917	3.023	3.288	2.981	3.057	11.527	11.623	12.350

- = no data available

(a) Conventional hydroelectric power only. Hydroelectricity generated by pumped storage is not included in renewable energy.

(b) Solar consumption in the electric power, commercial, and industrial sectors includes energy produced from large scale (>1 MW) solar thermal and photovoltaic generators and small-scale (<1 MW) distributed solar photovoltaic systems.

(c) Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass.

(d) Losses and co-products from the production of fuel ethanol and biomass-based diesel

(e) Solar consumption in the residential sector includes energy from small-scale (<1 MW) solar photovoltaic systems. Also includes solar heating consumption in all sectors.

(f) Fuel ethanol and biomass-based diesel consumption in the transportation sector includes production, stock change, and imports less exports. Some biomass-based diesel may be consumed in the residential sector in heating oil.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Historical data: Latest data available from EIA databases supporting the following reports: *Electric Power Monthly*, DOE/EIA-0226 and *Renewable Energy Annual*, DOE/EIA-0603; *Petroleum Supply Monthly*, DOE/EIA-0109.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.

Table 8b. U.S. Renewable Electricity Generation and Capacity
U.S. Energy Information Administration | Short-Term Energy Outlook - February 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Renewable Energy Electric Generating Capacity (megawatts, end of period)															
Electric Power Sector (a)															
Biomass	7,254	7,227	7,223	7,170	7,363	7,358	7,358	7,358	7,358	7,359	7,401	7,401	7,170	7,358	7,401
Waste	4,212	4,184	4,181	4,182	4,217	4,212	4,212	4,212	4,212	4,213	4,213	4,213	4,182	4,212	4,213
Wood	3,042	3,042	3,042	2,987	3,146	3,146	3,146	3,146	3,146	3,146	3,188	3,188	2,987	3,146	3,188
Conventional Hydroelectric	79,444	79,412	79,412	79,533	79,568	79,607	79,508	79,538	79,629	79,636	79,758	79,763	79,533	79,538	79,763
Geothermal	2,499	2,499	2,499	2,499	2,507	2,507	2,507	2,507	2,507	2,507	2,597	2,622	2,499	2,507	2,622
Large-Scale Solar (b)	27,974	28,818	29,321	31,679	32,687	33,429	33,730	36,363	37,019	40,126	40,478	43,074	31,679	36,363	43,074
Wind	88,541	88,665	89,674	94,657	96,533	97,880	99,688	105,250	107,459	108,264	108,698	113,652	94,657	105,250	113,652
Other Sectors (c)															
Biomass	6,656	6,621	6,621	6,621	6,630	6,605	6,607	6,621	6,621	6,621	6,621	6,621	6,621	6,621	6,621
Waste	873	873	873	873	873	873	875	889	889	889	889	889	873	889	889
Wood	5,783	5,747	5,747	5,748	5,757	5,732	5,732	5,732	5,732	5,732	5,732	5,732	5,748	5,732	5,732
Conventional Hydroelectric	357	357	357	357	364	364	364	364	364	362	362	362	357	364	362
Large-Scale Solar (b)	359	366	371	377	379	382	382	381	381	384	384	384	377	381	384
Small-Scale Solar (d)	17,029	17,863	18,708	19,571	20,512	21,487	22,496	23,541	24,624	25,747	26,908	28,109	19,571	23,541	28,109
Residential Sector	10,155	10,657	11,180	11,738	12,308	12,895	13,496	14,116	14,752	15,407	16,079	16,767	11,738	14,116	16,767
Commercial Sector	5,490	5,761	6,020	6,273	6,585	6,913	7,258	7,621	8,002	8,403	8,824	9,266	6,273	7,621	9,266
Industrial Sector	1,385	1,445	1,509	1,560	1,619	1,679	1,741	1,804	1,870	1,937	2,006	2,077	1,560	1,804	2,077
Wind	113	110	116	116	116	116	116	116	116	116	116	116	116	116	116
Renewable Electricity Generation (thousand megawatthours per day)															
Electric Power Sector (a)															
Biomass	93	85	86	84	86	86	95	90	90	87	96	91	87	89	91
Waste	52	49	48	49	48	49	50	49	48	49	50	50	50	49	49
Wood	41	36	38	35	38	37	45	40	41	38	46	41	37	40	42
Conventional Hydroelectric	852	939	692	683	707	835	701	661	776	884	726	677	791	726	765
Geothermal	46	45	46	46	46	45	45	46	46	45	45	47	46	45	46
Large-Scale Solar (b)	140	230	219	138	153	242	240	167	176	281	289	201	182	201	237
Wind	869	820	581	756	900	917	676	941	1,019	1,035	757	1,042	756	858	963
Other Sectors (c)															
Biomass	87	86	86	85	87	86	86	85	87	86	86	85	86	86	86
Waste	78	77	77	76	78	77	77	76	78	77	77	76	77	77	77
Wood	9	9	8	9	9	9	8	9	9	9	8	9	9	9	9
Conventional Hydroelectric	5	5	4	4	5	5	4	4	5	5	4	4	4	4	4
Large-Scale Solar (b)	1	3	3	2	2	3	3	3	3	3	3	3	2	3	3
Small-Scale Solar (d)	64	97	96	66	76	115	117	82	93	139	140	98	81	98	118
Residential Sector	37	57	56	38	44	68	69	48	54	82	82	57	47	57	69
Commercial Sector	22	32	32	22	26	38	38	27	32	46	46	33	27	32	39
Industrial Sector	6	8	9	6	7	10	10	7	8	11	12	8	7	8	10
Wind	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

-- = no data available

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

(a) Power plants larger than or equal to one megawatt in size that are operated by electric utilities or independent power producers.

(b) Solar thermal and photovoltaic generating units at power plants larger than or equal to one megawatt.

(c) Businesses or individual households not primarily engaged in electric power production for sale to the public, whose generating capacity is at least one megawatt (except for small-scale solar photovoltaic data, which consists of systems smaller than one megawatt).

(d) Solar photovoltaic systems smaller than one megawatt, as measured in alternating current.

Historical data: Latest data available from EIA databases supporting the Electric Power Monthly, DOE/EIA-0226.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA-860M database, EIA-826 Solar PV database, and EIA Regional Short-Term Energy Model.

Table 9a. U.S. Macroeconomic Indicators and CO2 Emissions

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Macroeconomic															
Real Gross Domestic Product (billion chained 2012 dollars - SAAR)	18,324	18,512	18,665	18,798	<i>18,876</i>	<i>19,000</i>	<i>19,121</i>	<i>19,240</i>	<i>19,336</i>	<i>19,420</i>	<i>19,491</i>	<i>19,558</i>	18,575	<i>19,059</i>	<i>19,451</i>
Real Personal Consumption Expend. (billion chained 2012 dollars - SAAR)	12,723	12,842	12,953	13,073	<i>13,119</i>	<i>13,217</i>	<i>13,311</i>	<i>13,402</i>	<i>13,488</i>	<i>13,557</i>	<i>13,630</i>	<i>13,701</i>	12,898	<i>13,262</i>	<i>13,594</i>
Real Private Fixed Investment (billion chained 2012 dollars - SAAR)	3,271	3,322	3,332	3,357	<i>3,378</i>	<i>3,400</i>	<i>3,430</i>	<i>3,469</i>	<i>3,500</i>	<i>3,524</i>	<i>3,550</i>	<i>3,569</i>	3,321	<i>3,419</i>	<i>3,536</i>
Business Inventory Change (billion chained 2012 dollars - SAAR)	36	-10	93	92	<i>75</i>	<i>76</i>	<i>84</i>	<i>85</i>	<i>85</i>	<i>79</i>	<i>70</i>	<i>61</i>	53	<i>80</i>	<i>74</i>
Real Government Expenditures (billion chained 2012 dollars - SAAR)	3,152	3,172	3,192	3,222	<i>3,250</i>	<i>3,269</i>	<i>3,276</i>	<i>3,280</i>	<i>3,285</i>	<i>3,301</i>	<i>3,297</i>	<i>3,297</i>	3,184	<i>3,269</i>	<i>3,295</i>
Real Exports of Goods & Services (billion chained 2012 dollars - SAAR)	2,518	2,574	2,542	2,562	<i>2,597</i>	<i>2,632</i>	<i>2,671</i>	<i>2,715</i>	<i>2,752</i>	<i>2,783</i>	<i>2,808</i>	<i>2,829</i>	2,549	<i>2,654</i>	<i>2,793</i>
Real Imports of Goods & Services (billion chained 2012 dollars - SAAR)	3,420	3,415	3,492	3,561	<i>3,605</i>	<i>3,659</i>	<i>3,720</i>	<i>3,783</i>	<i>3,855</i>	<i>3,910</i>	<i>3,955</i>	<i>3,993</i>	3,472	<i>3,692</i>	<i>3,928</i>
Real Disposable Personal Income (billion chained 2012 dollars - SAAR)	14,220	14,282	14,365	14,472	<i>14,602</i>	<i>14,717</i>	<i>14,808</i>	<i>14,894</i>	<i>14,966</i>	<i>15,056</i>	<i>15,140</i>	<i>15,211</i>	14,335	<i>14,755</i>	<i>15,093</i>
Non-Farm Employment (millions)	148.1	148.7	149.3	150.0	<i>150.5</i>	<i>151.0</i>	<i>151.4</i>	<i>151.9</i>	<i>152.3</i>	<i>152.9</i>	<i>153.0</i>	<i>153.1</i>	149.0	<i>151.2</i>	<i>152.8</i>
Civilian Unemployment Rate (percent)	4.1	3.9	3.8	3.8	<i>3.7</i>	<i>3.7</i>	<i>3.6</i>	<i>3.6</i>	<i>3.6</i>	<i>3.6</i>	<i>3.7</i>	<i>3.8</i>	3.9	<i>3.6</i>	<i>3.7</i>
Housing Starts (millions - SAAR)	1.32	1.26	1.23	1.24	<i>1.25</i>	<i>1.27</i>	<i>1.31</i>	<i>1.34</i>	<i>1.38</i>	<i>1.40</i>	<i>1.41</i>	<i>1.43</i>	1.26	<i>1.29</i>	<i>1.40</i>
Industrial Production Indices (Index, 2012=100)															
Total Industrial Production	105.9	107.3	108.5	109.2	<i>109.8</i>	<i>110.2</i>	<i>110.9</i>	<i>111.5</i>	<i>112.0</i>	<i>112.2</i>	<i>112.5</i>	<i>113.0</i>	107.7	<i>110.6</i>	<i>112.4</i>
Manufacturing	104.1	104.8	105.8	106.1	<i>106.7</i>	<i>107.4</i>	<i>108.3</i>	<i>109.1</i>	<i>109.6</i>	<i>109.8</i>	<i>110.0</i>	<i>110.5</i>	105.2	<i>107.9</i>	<i>110.0</i>
Food	114.1	114.8	115.8	114.2	<i>115.2</i>	<i>115.9</i>	<i>116.6</i>	<i>117.2</i>	<i>117.7</i>	<i>118.2</i>	<i>118.6</i>	<i>119.2</i>	114.7	<i>116.2</i>	<i>118.4</i>
Paper	96.0	96.1	96.2	96.3	<i>96.0</i>	<i>96.0</i>	<i>96.0</i>	<i>96.0</i>	<i>95.7</i>	<i>95.4</i>	<i>95.1</i>	<i>95.1</i>	96.1	<i>96.0</i>	<i>95.3</i>
Petroleum and Coal Products	106.6	107.5	107.6	105.7	<i>106.9</i>	<i>107.8</i>	<i>108.6</i>	<i>109.3</i>	<i>109.9</i>	<i>110.1</i>	<i>110.5</i>	<i>110.8</i>	106.8	<i>108.1</i>	<i>110.3</i>
Chemicals	96.7	98.9	99.9	100.0	<i>101.2</i>	<i>102.1</i>	<i>102.9</i>	<i>103.8</i>	<i>104.5</i>	<i>105.2</i>	<i>106.0</i>	<i>106.9</i>	98.9	<i>102.5</i>	<i>105.7</i>
Nonmetallic Mineral Products	119.2	120.8	119.3	118.5	<i>118.0</i>	<i>118.4</i>	<i>119.1</i>	<i>120.0</i>	<i>120.8</i>	<i>121.5</i>	<i>122.1</i>	<i>122.7</i>	119.4	<i>118.9</i>	<i>121.8</i>
Primary Metals	96.1	96.4	96.7	100.4	<i>103.1</i>	<i>104.8</i>	<i>105.6</i>	<i>105.4</i>	<i>104.5</i>	<i>102.8</i>	<i>100.7</i>	<i>98.7</i>	97.4	<i>104.7</i>	<i>101.7</i>
Coal-weighted Manufacturing (a)	103.5	104.8	105.2	105.6	<i>106.7</i>	<i>107.6</i>	<i>108.2</i>	<i>108.7</i>	<i>108.7</i>	<i>108.5</i>	<i>108.3</i>	<i>108.2</i>	104.8	<i>107.8</i>	<i>108.5</i>
Distillate-weighted Manufacturing (a)	111.1	111.7	111.9	111.5	<i>111.9</i>	<i>112.5</i>	<i>113.2</i>	<i>113.8</i>	<i>114.2</i>	<i>114.3</i>	<i>114.5</i>	<i>114.7</i>	111.5	<i>112.9</i>	<i>114.4</i>
Electricity-weighted Manufacturing (a)	104.1	105.2	106.0	106.5	<i>107.5</i>	<i>108.4</i>	<i>109.2</i>	<i>109.8</i>	<i>110.1</i>	<i>110.1</i>	<i>110.0</i>	<i>110.2</i>	105.5	<i>108.7</i>	<i>110.1</i>
Natural Gas-weighted Manufacturing (a) ...	103.8	105.6	106.5	106.4	<i>107.6</i>	<i>108.6</i>	<i>109.4</i>	<i>110.1</i>	<i>110.5</i>	<i>110.6</i>	<i>110.9</i>	<i>111.4</i>	105.6	<i>108.9</i>	<i>110.8</i>
Price Indexes															
Consumer Price Index (all urban consumers) (index, 1982-1984=1.00)	2.49	2.50	2.52	2.53	<i>2.53</i>	<i>2.55</i>	<i>2.56</i>	<i>2.58</i>	<i>2.60</i>	<i>2.61</i>	<i>2.62</i>	<i>2.63</i>	2.51	<i>2.55</i>	<i>2.61</i>
Producer Price Index: All Commodities (index, 1982=1.00)	2.01	2.01	2.02	2.02	<i>2.00</i>	<i>2.00</i>	<i>2.01</i>	<i>2.03</i>	<i>2.05</i>	<i>2.05</i>	<i>2.05</i>	<i>2.06</i>	2.01	<i>2.01</i>	<i>2.05</i>
Producer Price Index: Petroleum (index, 1982=1.00)	1.98	2.22	2.26	2.10	<i>1.78</i>	<i>1.87</i>	<i>1.88</i>	<i>1.83</i>	<i>1.85</i>	<i>1.92</i>	<i>1.90</i>	<i>1.83</i>	2.14	<i>1.84</i>	<i>1.88</i>
GDP Implicit Price Deflator (index, 2012=100)	109.3	110.2	110.7	111.2	<i>111.8</i>	<i>112.3</i>	<i>112.9</i>	<i>113.5</i>	<i>114.2</i>	<i>114.9</i>	<i>115.5</i>	<i>116.2</i>	110.3	<i>112.6</i>	<i>115.2</i>
Miscellaneous															
Vehicle Miles Traveled (b) (million miles/day)	8,232	9,225	9,080	8,845	<i>8,415</i>	<i>9,372</i>	<i>9,223</i>	<i>8,954</i>	<i>8,491</i>	<i>9,501</i>	<i>9,369</i>	<i>9,033</i>	8,848	<i>8,993</i>	<i>9,099</i>
Air Travel Capacity (Available ton-miles/day, thousands)	603	664	667	641	<i>624</i>	<i>658</i>	<i>666</i>	<i>642</i>	<i>622</i>	<i>655</i>	<i>665</i>	<i>643</i>	644	<i>647</i>	<i>646</i>
Aircraft Utilization (Revenue ton-miles/day, thousands)	368	414	418	400	<i>385</i>	<i>419</i>	<i>424</i>	<i>403</i>	<i>384</i>	<i>419</i>	<i>426</i>	<i>405</i>	400	<i>408</i>	<i>409</i>
Airline Ticket Price Index (index, 1982-1984=100)	262.8	277.9	259.7	264.1	<i>285.0</i>	<i>326.9</i>	<i>321.6</i>	<i>325.3</i>	<i>323.7</i>	<i>354.5</i>	<i>341.6</i>	<i>341.1</i>	266.1	<i>314.7</i>	<i>340.2</i>
Raw Steel Production (million short tons per day)	0.251	0.253	0.263	0.270	<i>0.287</i>	<i>0.290</i>	<i>0.276</i>	<i>0.246</i>	<i>0.306</i>	<i>0.303</i>	<i>0.280</i>	<i>0.244</i>	0.259	<i>0.274</i>	<i>0.283</i>
Carbon Dioxide (CO2) Emissions (million metric tons)															
Petroleum	578	591	601	606	<i>581</i>	<i>595</i>	<i>607</i>	<i>599</i>	<i>590</i>	<i>596</i>	<i>611</i>	<i>601</i>	2,376	<i>2,382</i>	<i>2,399</i>
Natural Gas	478	349	370	421	<i>485</i>	<i>354</i>	<i>371</i>	<i>427</i>	<i>490</i>	<i>358</i>	<i>383</i>	<i>431</i>	1,618	<i>1,637</i>	<i>1,662</i>
Coal	308	288	356	317	<i>307</i>	<i>257</i>	<i>324</i>	<i>289</i>	<i>304</i>	<i>240</i>	<i>297</i>	<i>270</i>	1,269	<i>1,177</i>	<i>1,110</i>
Total Energy (c)	1,366	1,232	1,330	1,346	<i>1,376</i>	<i>1,208</i>	<i>1,304</i>	<i>1,319</i>	<i>1,387</i>	<i>1,196</i>	<i>1,294</i>	<i>1,305</i>	5,274	<i>5,208</i>	<i>5,182</i>

- = no data available

SAAR = Seasonally-adjusted annual rate

 (a) Fuel share weights of individual sector indices based on EIA *Manufacturing Energy Consumption Survey* .

(b) Total highway travel includes gasoline and diesel fuel vehicles.

(c) Includes electric power sector use of geothermal energy and non-biomass waste.

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Historical data: Latest data available from U.S. Department of Commerce, Bureau of Economic Analysis; Federal Reserve System, Statistical release G17; Federal Highway Administration; and Federal Aviation Administration. Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model. U.S. macroeconomic projections are based on the IHS Markit model of the U.S. Economy.

Table 9b. U.S. Regional Macroeconomic Data

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Real Gross State Product (Billion \$2009)															
New England	971	980	988	993	997	1,002	1,007	1,013	1,017	1,022	1,025	1,028	983	1,005	1,023
Middle Atlantic	2,735	2,759	2,777	2,796	2,806	2,820	2,835	2,851	2,863	2,874	2,883	2,890	2,767	2,828	2,877
E. N. Central	2,480	2,504	2,523	2,538	2,544	2,557	2,570	2,582	2,591	2,596	2,600	2,604	2,511	2,563	2,597
W. N. Central	1,145	1,159	1,167	1,174	1,177	1,183	1,190	1,196	1,201	1,205	1,209	1,213	1,161	1,187	1,207
S. Atlantic	3,263	3,295	3,322	3,347	3,362	3,385	3,407	3,428	3,448	3,465	3,479	3,495	3,307	3,395	3,472
E. S. Central	815	823	829	834	837	842	847	851	855	857	860	862	826	844	859
W. S. Central	2,214	2,246	2,270	2,290	2,304	2,322	2,339	2,358	2,373	2,388	2,401	2,412	2,255	2,331	2,394
Mountain	1,197	1,210	1,222	1,231	1,238	1,248	1,258	1,267	1,274	1,282	1,289	1,295	1,215	1,253	1,285
Pacific	3,536	3,569	3,601	3,629	3,645	3,675	3,702	3,728	3,749	3,766	3,781	3,795	3,584	3,688	3,773
Industrial Output, Manufacturing (Index, Year 2012=100)															
New England	98.9	99.3	100.0	99.9	100.2	100.6	101.3	101.8	102.1	102.2	102.3	102.7	99.5	101.0	102.3
Middle Atlantic	98.1	98.4	98.8	99.0	99.4	99.9	100.6	101.2	101.6	101.7	101.9	102.2	98.6	100.3	101.9
E. N. Central	106.5	107.1	107.7	108.1	108.7	109.7	110.6	111.5	112.0	112.0	111.9	112.2	107.4	110.1	112.0
W. N. Central	104.0	104.6	105.8	106.1	106.6	107.4	108.3	109.2	109.8	110.0	110.3	110.8	105.1	107.9	110.2
S. Atlantic	107.8	108.7	110.0	110.2	110.8	111.4	112.4	113.1	113.6	113.8	113.9	114.4	109.2	111.9	113.9
E. S. Central	108.9	109.0	110.4	110.9	111.7	112.5	113.6	114.5	115.0	115.2	115.4	115.8	109.8	113.1	115.4
W. S. Central	97.5	99.0	100.0	100.4	101.2	102.0	103.1	103.8	104.4	104.7	105.0	105.7	99.2	102.5	105.0
Mountain	111.6	113.0	115.0	115.3	116.0	116.8	117.9	118.9	119.5	120.0	120.4	121.0	113.7	117.4	120.2
Pacific	103.6	103.7	104.6	104.8	105.3	105.9	106.8	107.5	108.0	108.2	108.4	109.0	104.2	106.4	108.4
Real Personal Income (Billion \$2009)															
New England	858	859	864	869	876	882	887	891	895	899	903	907	862	884	901
Middle Atlantic	2,218	2,223	2,235	2,248	2,266	2,280	2,292	2,303	2,312	2,322	2,332	2,339	2,231	2,285	2,326
E. N. Central	2,342	2,351	2,367	2,382	2,401	2,418	2,430	2,442	2,453	2,465	2,475	2,482	2,361	2,423	2,469
W. N. Central	1,080	1,085	1,094	1,102	1,112	1,121	1,128	1,136	1,143	1,151	1,158	1,163	1,090	1,124	1,154
S. Atlantic	3,082	3,092	3,113	3,137	3,166	3,194	3,218	3,240	3,260	3,283	3,305	3,324	3,106	3,204	3,293
E. S. Central	862	865	869	875	882	888	893	897	902	906	911	914	868	890	908
W. S. Central	1,876	1,890	1,902	1,919	1,939	1,955	1,969	1,982	1,995	2,009	2,022	2,033	1,897	1,961	2,015
Mountain	1,101	1,104	1,112	1,121	1,133	1,143	1,152	1,160	1,168	1,178	1,186	1,194	1,110	1,147	1,181
Pacific	2,669	2,677	2,692	2,713	2,736	2,761	2,780	2,798	2,813	2,832	2,850	2,865	2,688	2,769	2,840
Households (Thousands)															
New England	5,906	5,915	5,929	5,938	5,947	5,955	5,964	5,974	5,983	5,993	6,001	6,008	5,938	5,974	6,008
Middle Atlantic	16,127	16,146	16,182	16,204	16,225	16,245	16,267	16,292	16,315	16,340	16,360	16,379	16,204	16,292	16,379
E. N. Central	18,967	18,996	19,043	19,071	19,095	19,119	19,149	19,181	19,212	19,252	19,286	19,317	19,071	19,181	19,317
W. N. Central	8,608	8,634	8,665	8,687	8,708	8,728	8,750	8,772	8,794	8,818	8,839	8,859	8,687	8,772	8,859
S. Atlantic	25,526	25,627	25,749	25,845	25,941	26,030	26,120	26,214	26,309	26,408	26,498	26,584	25,845	26,214	26,584
E. S. Central	7,644	7,664	7,690	7,708	7,727	7,745	7,765	7,785	7,804	7,825	7,843	7,861	7,708	7,785	7,861
W. S. Central	14,716	14,768	14,837	14,896	14,957	15,016	15,077	15,139	15,202	15,267	15,328	15,387	14,896	15,139	15,387
Mountain	9,224	9,268	9,321	9,362	9,402	9,440	9,479	9,519	9,559	9,600	9,639	9,678	9,362	9,519	9,678
Pacific	18,896	18,950	19,029	19,085	19,140	19,188	19,241	19,294	19,346	19,400	19,450	19,497	19,085	19,294	19,497
Total Non-farm Employment (Millions)															
New England	7.4	7.5	7.5	7.5	7.5	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.5	7.6	7.6
Middle Atlantic	19.7	19.8	19.8	19.9	20.0	20.0	20.0	20.1	20.1	20.2	20.2	20.2	19.8	20.0	20.1
E. N. Central	22.1	22.2	22.2	22.3	22.4	22.4	22.5	22.5	22.6	22.6	22.6	22.6	22.2	22.4	22.6
W. N. Central	10.7	10.7	10.8	10.8	10.8	10.9	10.9	10.9	10.9	11.0	11.0	11.0	10.8	10.9	11.0
S. Atlantic	28.4	28.6	28.7	28.9	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.6	28.7	29.1	29.5
E. S. Central	8.1	8.2	8.2	8.2	8.3	8.3	8.3	8.3	8.3	8.4	8.4	8.4	8.2	8.3	8.4
W. S. Central	17.3	17.4	17.5	17.6	17.7	17.8	17.8	17.9	18.0	18.1	18.1	18.1	17.5	17.8	18.1
Mountain	10.7	10.8	10.8	10.9	10.9	11.0	11.0	11.1	11.1	11.2	11.2	11.3	10.8	11.0	11.2
Pacific	23.3	23.4	23.5	23.6	23.7	23.7	23.8	23.9	24.0	24.1	24.1	24.1	23.4	23.8	24.1

- = no data available

Notes: The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Regions refer to U.S. Census divisions.

 See "Census division" in EIA's Energy Glossary (<http://www.eia.doe.gov/glossary/index.html>) for a list of States in each region.

Historical data: Latest data available from U.S. Department of Commerce, Bureau of Economic Analysis; Federal Reserve System, Statistical release G17.

Minor discrepancies with published historical data are due to independent rounding.

Projections: Macroeconomic projections are based on the IHS Markit model of the U.S. Economy.

Table 9c. U.S. Regional Weather Data

U.S. Energy Information Administration | Short-Term Energy Outlook - February 2019

	2018				2019				2020				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2018	2019	2020
Heating Degree Days															
New England	3,051	907	70	2,273	3,191	868	126	2,129	3,166	874	126	2,129	6,300	6,314	6,295
Middle Atlantic	2,936	753	38	2,010	2,955	698	78	1,969	2,946	705	78	1,969	5,737	5,701	5,699
E. N. Central	3,209	825	60	2,298	3,178	740	125	2,229	3,153	742	125	2,229	6,392	6,272	6,248
W. N. Central	3,421	828	120	2,589	3,243	712	159	2,410	3,224	708	159	2,410	6,958	6,524	6,502
South Atlantic	1,443	220	2	945	1,399	198	14	991	1,426	200	14	990	2,611	2,602	2,630
E. S. Central	1,818	327	2	1,322	1,786	258	20	1,326	1,825	254	20	1,326	3,469	3,390	3,426
W. S. Central	1,192	142	3	904	1,164	94	4	784	1,140	83	4	783	2,240	2,046	2,010
Mountain	2,119	598	124	1,934	2,185	692	143	1,818	2,187	685	143	1,817	4,775	4,839	4,832
Pacific	1,440	539	84	1,050	1,396	538	85	1,203	1,478	546	85	1,204	3,113	3,223	3,313
U.S. Average	2,129	522	48	1,549	2,103	486	73	1,525	2,111	486	73	1,523	4,249	4,186	4,192
Heating Degree Days, Prior 10-year Average															
New England	3,171	817	119	2,120	3,165	820	111	2,119	3,149	820	104	2,109	6,229	6,215	6,182
Middle Atlantic	2,947	646	81	1,949	2,956	650	76	1,937	2,945	650	70	1,931	5,623	5,618	5,596
E. N. Central	3,209	692	116	2,211	3,196	697	112	2,195	3,183	696	108	2,189	6,228	6,199	6,175
W. N. Central	3,264	705	144	2,379	3,255	702	140	2,379	3,247	696	137	2,364	6,492	6,476	6,444
South Atlantic	1,476	177	12	974	1,480	177	11	961	1,465	176	11	957	2,638	2,629	2,609
E. S. Central	1,868	217	18	1,301	1,862	222	17	1,291	1,857	221	17	1,281	3,404	3,391	3,376
W. S. Central	1,181	80	4	801	1,183	85	4	806	1,194	84	3	786	2,066	2,078	2,067
Mountain	2,194	737	144	1,841	2,164	714	139	1,853	2,168	709	137	1,827	4,917	4,871	4,841
Pacific	1,464	592	84	1,182	1,444	581	82	1,169	1,426	576	84	1,158	3,322	3,276	3,245
U.S. Average	2,160	478	71	1,525	2,150	475	68	1,515	2,138	473	66	1,502	4,233	4,209	4,179
Cooling Degree Days															
New England	0	79	582	0	0	86	420	2	0	86	420	2	661	508	508
Middle Atlantic	0	176	706	4	0	154	541	4	0	154	541	4	887	699	699
E. N. Central	0	332	638	4	0	211	531	7	0	211	531	7	974	749	749
W. N. Central	2	439	686	6	3	257	664	10	3	257	664	10	1,132	934	934
South Atlantic	137	724	1,266	286	112	646	1,151	219	121	649	1,152	220	2,413	2,128	2,142
E. S. Central	36	648	1,161	79	20	504	1,044	61	27	505	1,044	61	1,925	1,629	1,637
W. S. Central	126	1,006	1,565	163	69	828	1,508	207	90	840	1,509	207	2,859	2,612	2,645
Mountain	21	506	999	48	16	421	932	78	18	423	933	78	1,575	1,447	1,451
Pacific	31	183	726	75	27	173	590	58	28	172	589	58	1,014	847	847
U.S. Average	52	476	958	99	38	391	851	91	43	394	852	91	1,585	1,370	1,380
Cooling Degree Days, Prior 10-year Average															
New England	0	81	433	1	0	79	455	1	0	84	466	1	515	535	551
Middle Atlantic	0	166	567	5	0	165	589	6	0	171	600	6	738	760	777
E. N. Central	3	228	533	7	3	242	548	7	3	244	567	8	770	800	821
W. N. Central	7	277	659	11	7	298	669	11	7	300	690	12	954	985	1,009
South Atlantic	119	675	1,161	227	120	684	1,180	240	123	685	1,187	239	2,183	2,224	2,234
E. S. Central	34	539	1,031	63	36	554	1,049	67	35	552	1,065	69	1,667	1,706	1,721
W. S. Central	100	887	1,532	204	103	897	1,552	205	100	893	1,557	211	2,722	2,758	2,760
Mountain	24	426	922	84	25	438	932	81	24	440	933	83	1,457	1,476	1,481
Pacific	30	185	621	78	31	185	632	77	31	186	625	78	915	924	920
U.S. Average	45	408	855	94	46	417	873	97	46	419	882	98	1,402	1,433	1,446

- = no data available

Notes: Regional degree days for each period are calculated by EIA as contemporaneous period population-weighted averages of state degree day data published by the National Oceanic and Atmospheric Administration (NOAA).

See *Change in Regional and U.S. Degree-Day Calculations* (http://www.eia.gov/forecasts/steo/special/pdf/2012_sp_04.pdf) for more information.

The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

Regions refer to U.S. Census divisions. See "Census division" in EIA's Energy Glossary (<http://www.eia.gov/tools/glossary/>) for a list of states in each region.

Historical data: Latest data available from U.S. Department of Commerce, National Oceanic and Atmospheric Association (NOAA).

Projections: Based on forecasts by the NOAA Climate Prediction Center (<http://www.cpc.ncep.noaa.gov/pacdir/DDdir/NHOME3.shtml>).

Appendix to the February 2019 *Short-Term Energy Outlook*

This appendix is prepared in fulfillment of section 1245(d)(4)(A) of the National Defense Authorization Act (NDAA) for Fiscal Year 2012, as amended. The law requires the U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy, to submit to Congress a report on the availability and price of petroleum and petroleum products produced in countries other than Iran in the two-month period preceding the submission of the report. By law, EIA's data, analyses, and forecasts are independent of approval by any other officer or employee of the U.S. Government. The data in this appendix, therefore, should not be construed as representing those of the U.S. Department of Energy or other federal agencies.

EIA consulted with the U.S. Department of the Treasury, the U.S. Department of State, and the intelligence community in the process of developing the NDAA report, which was previously published as a stand-alone report. Detailed background and contextual information not repeated here can be found in [early editions of the NDAA report](#).

This appendix is published in the *Short-Term Energy Outlook* in even numbered months.

Table a1. Summary of Estimated Petroleum and Other Liquids Quantities

	December 2018	January 2019	Dec 2018 – Jan 2019 Average	Dec 2017 – Jan 2018 Average	2015 – 2017 Average
Global Petroleum and Other Liquids (million barrels per day)					
Global Petroleum and Other Liquids Production (a)	101.8	100.6	101.2	98.9	97.5
Global Petroleum and Other Liquids Consumption (b)	101.6	99.2	100.4	98.6	97.1
Biofuels Production (c)	2.3	2.0	2.2	2.1	2.3
Biofuels Consumption (c)	2.4	2.3	2.3	2.3	2.3
Iran Liquid Fuels Production	3.5	3.6	3.6	4.8	4.2
Iran Liquid Fuels Consumption	1.9	1.9	1.9	1.8	1.8
Petroleum and Petroleum Products Produced and Consumed in Countries Other Than Iran (million barrels per day)					
Production (d)	96.0	94.9	95.5	91.9	90.9
Consumption (d)	97.3	95.0	96.2	94.6	93.0
Production minus Consumption	-1.3	-0.1	-0.7	-2.6	-2.1
World Inventory Net Withdrawals Including Iran	-0.3	-1.4	-0.8	-0.2	-0.3
Estimated OECD Inventory Level (e) (million barrels)	2,863	2,875	2,869	2,854	2,968
Surplus Production Capacity (million barrels per day)					
OPEC Surplus Crude Oil Production Capacity (f)	1.2	2.1	1.6	1.9	1.5

Note: The term "petroleum and other liquids" encompasses crude oil, lease condensate, natural gas liquids, biofuels, coal-to-liquids, gas-to-liquids, and refinery processing gains, which are important to consider in concert due to the inter-related supply, demand, and price dynamics of petroleum, petroleum products, and related fuels.

(a) Production includes crude oil (including lease condensates), natural gas liquids, other liquids, and refinery processing gains.

(b) Consumption of petroleum by the OECD countries is synonymous with "products supplied," defined in the glossary of the EIA Petroleum Supply Monthly, DOE/EIA-0109. Consumption of petroleum by the non-OECD countries is "apparent consumption," which includes internal consumption, refinery fuel, and loss, and bunkering.

(c) Biofuels production and consumption are based on EIA estimates as published in the International Energy Statistics. Biofuels production in the third quarter tends to be at its highest level in the year as ethanol production in Brazil reaches its seasonal peak and is typically lowest in the first quarter as seasonal production falls in the South/South-Central region of Brazil.

(d) Global production of petroleum and petroleum products outside of Iran is derived by subtracting biofuels production and Iran liquid fuels production from global liquid fuels production. The same method is used to calculate global consumption outside of Iran.

(e) Estimated inventory level is for OECD countries only.

(f) EIA defines surplus oil production capacity as potential oil production that could be brought online within 30 days and sustained for at least 90 days, consistent with sound business practices. This does not include oil production increases that could not be sustained without degrading the future production capacity of a field.

Source: U.S. Energy Information Administration.

Table a2. Crude Oil and Petroleum Product Price Data

Item	December 2018	January 2019	December 2018 – January 2019 Average	December 2017 – January 2018 Average	2015–2017 Average
Brent Front Month Futures Price (\$ per barrel)	57.67	60.24	58.99	66.65	51.16
WTI Front Month Futures Price (\$ per barrel)	48.98	51.55	50.30	60.87	47.69
Dubai Front Month Futures Price (\$ per barrel)	56.98	59.64	58.34	64.01	48.82
Brent 1st - 13th Month Futures Spread (\$ per barrel)	-1.11	-0.31	-0.70	3.92	-3.90
WTI 1st - 13th Month Futures Spread (\$ per barrel)	-2.31	-2.29	-2.30	3.32	-4.26
RBOB Front Month Futures Price (\$ per gallon)	1.39	1.38	1.39	1.79	1.55
Heating Oil Front Month Futures Price (\$ per gallon)	1.80	1.86	1.83	2.01	1.56
RBOB - Brent Futures Crack Spread (\$ per gallon)	0.01	-0.05	-0.02	0.20	0.34
Heating Oil - Brent Futures Crack Spread (\$ per gallon)	0.43	0.42	0.42	0.43	0.34

(a) Brent refers to Brent crude oil traded on the Intercontinental Exchange (ICE).

(b) WTI refers to West Texas Intermediate crude oil traded on the New York Mercantile Exchange (NYMEX), owned by Chicago Mercantile Exchange (CME) Group.

(c) RBOB refers to reformulated blendstock for oxygenate blending traded on the NYMEX.

Source: U.S. Energy Information Administration, based on Chicago Mercantile Exchange (CME), Intercontinental Exchange (ICE), and Dubai Mercantile Exchange (DME).